

college

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business

AUGUST 1957

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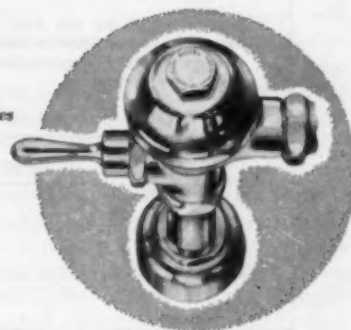
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AMONG THE AUTHORS: Glen C. Turner, controller, Colorado State College, Greeley, comments on the status of the business officer out of experience of more than 30 years as a college administrator (p. 19). He has been controller at Colorado State since 1940. C. John Kuhn, vice president and treasurer of C.I.T. Financial Corporation, suggests on page 24 the advantages of short-term investments in providing colleges with much needed additional income. Mr. Kuhn speaks out of experience in both business and education, having served from 1923 to 1927 as assistant treasurer of the University of Rochester. John A. Baird Jr., assistant to the president of Eastern Baptist Theological Seminary, Philadelphia, on page 28 points out certain financial operations of theological seminaries that put them in an entirely different class from the typical college or university. Mr. Baird is a director of Shipley School at Bryn Mawr, Pa., the American Sunday School Union, and the Main Line Branch of the Philadelphia Y.M.C.A., and is active in Boy Scout work.

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QUESTIONS AND ANSWERS

Allocating Program

Question: What dangers are involved in using dollar expenditures as a basis for determining the proportion of the institutional program to be allocated to teaching and to research?—C.T., Wash.

ANSWER: The proportion of institutional program to be allocated to teaching and to research can be determined only in the light of the basic aims and purposes of the institution. No arbitrary formula, whether based on dollars of expenditures or any other objective measure, seems appropriate as a means of determining mechanically the relative emphasis to be given research and teaching in the institution's program. Such an allocation involves decisions at the highest policy level of institutional control.

Some of the inherent difficulties of an arbitrary allocation of program emphasis on research and on teaching based on dollar expenditures might be listed as follows:

1. The complete lack of any available unit cost technics for analyzing research expenditures.
2. The lack of available normative data showing anything like a complete picture of total expenditures for research in institutions of higher education.
3. Our present inability to give any adequate expression to the comparative value of that which is bought by a dollar spent on research and a dollar spent on instruction.
4. The fact that most of the funds used for research in institutions of higher education are provided specifically for that purpose and for no other, through research contracts or sponsorship or governmental appropriations. Such projects usually carry their own financing, thus changing materially the base on which any percentage allocation of financial requirements would be calculated.
5. The dependence of both research and teaching programs on the interests and capabilities of faculty members, such interests and capabilities being not completely or immediately flexible in response to dollar inducements.
6. The inevitable tendency of institutions to respond to pressures from without, which may at times require a response in the direction of more emphasis on instruction, and at other

times more emphasis on research, without regard to any predetermined allocation of expenditures.—JOHN DALE RUSSELL, *chancellor and executive secretary, Board of Educational Finance, State of New Mexico.*

Screening Technics

Question: Can state legislatures be educated to the problems involved in selection of candidates so that they will acquiesce to the use of screening technics?—P.D., N.D.

ANSWER: It is assumed that the question of educating state legislatures to the problems involved in the selection of candidates refers primarily to candidacy of individuals who are not seeking positions in which they would be directly engaged in instruction or research. This would mean individuals who are candidates for certain administrative, clerical or service positions. It is assumed that the legislature would ordinarily permit governing boards to appoint faculty members upon recommendation by the chief executive.

Colleges and universities have a responsibility to students, staff, parents, alumni and the general public. Most of these institutions of higher education are exceedingly complex and require the services of a vast variety of skilled personnel. The activities of most colleges and universities are more diversified than is the average state agency or, for that matter, many commercial and industrial organizations. In addition to instruction, research and public service, the college or university must provide many supporting services. It must operate a complicated plant and provide residence halls, food services, bookstores, duplicating services, shops and transportation facilities.

Since colleges and universities have a responsibility to many different groups, they must, of necessity, screen most carefully all applicants for employment in order to maintain a harmonious and wholesome relationship. If the institution is willing to do this, it would follow that the state legislature should be willing to permit institutional selection of employees in order that competent personnel may be available for positions requiring a great variety of technical and specialized skills.—RAYMOND W. KETTLER, *controller, the Regents of the University of California.*

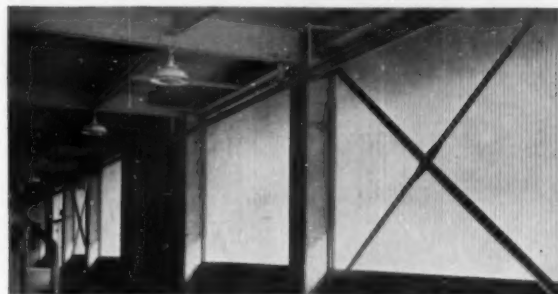
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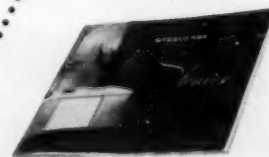


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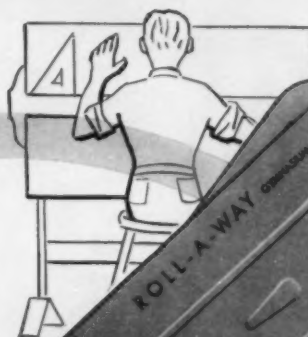
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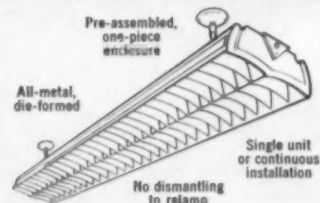
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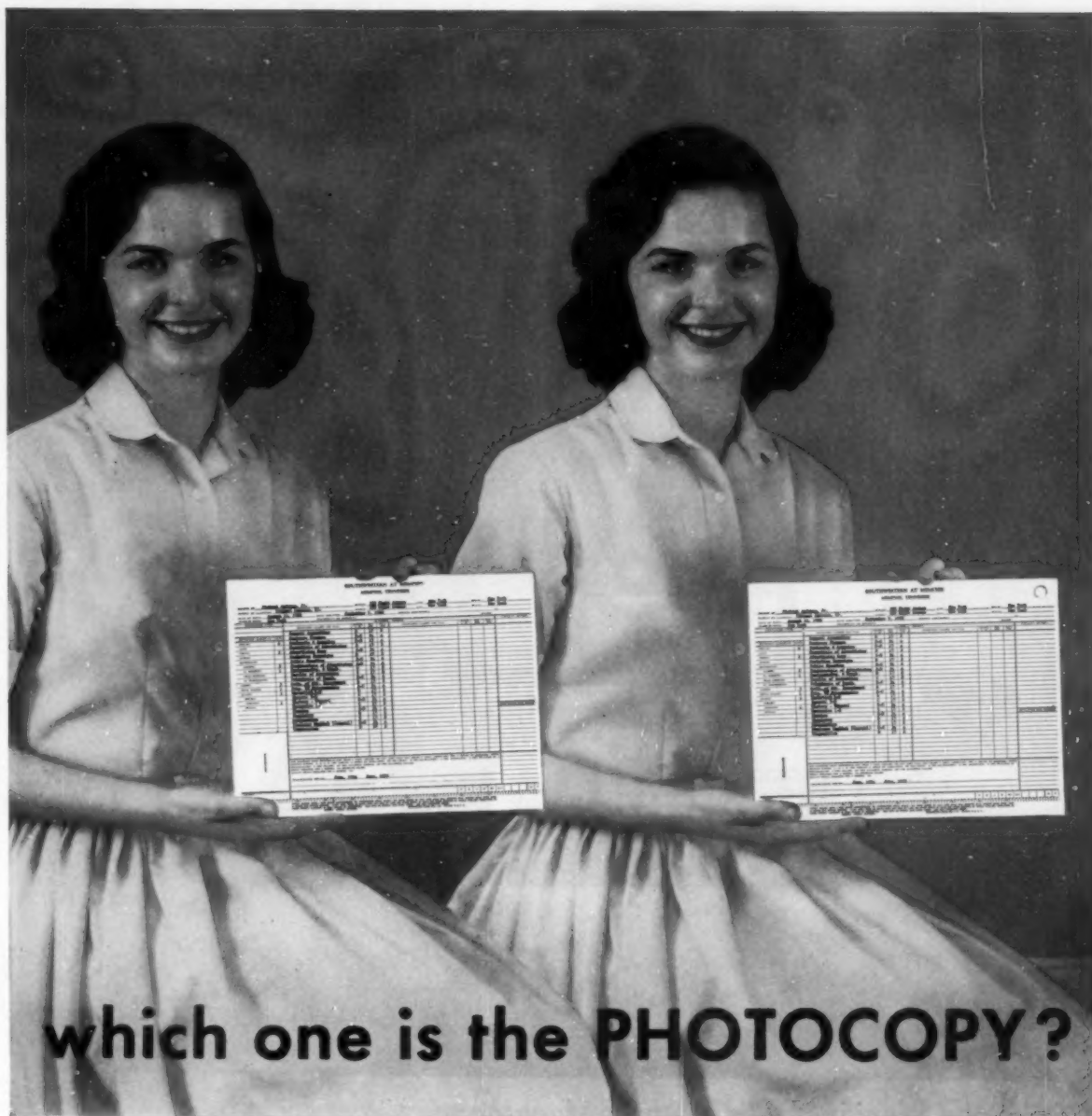


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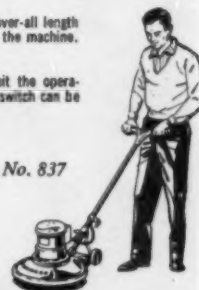
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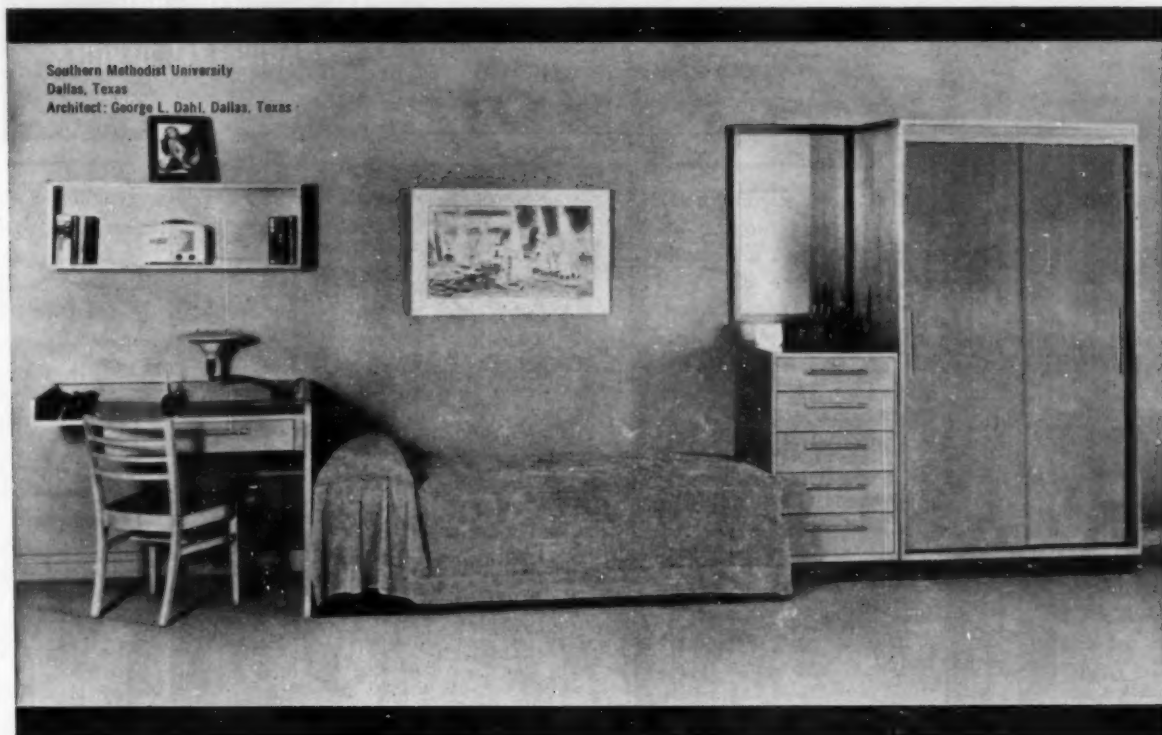
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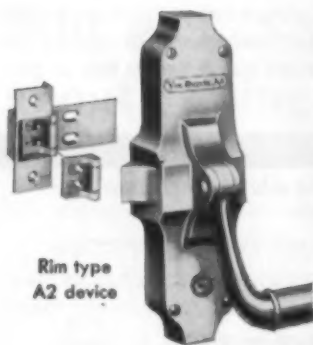
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Let's Finance Public Education at the Local-State Level

CHARLES F. PHILLIPS

President, Bates College, Lewiston, Maine



WHILE EDUCATORS MAY DISAGREE ON THE SIGNIFICANCE of I.Q.'s, whether Johnny is being taught to read, and how many of our young people should go to college, they are united in the opinion that our country must spend more money on public education.

But when faced with the question, "Where is the money coming from?" disagreement again appears among educators. One school of thought has found expression in a number of bills currently before Congress. While these bills differ in detail, they have a common aim—to make federal funds available for the construction of public schools. The major argument presented by those who support this move away from our traditional reliance upon state and local responsibility for public education can be expressed very simply: Today's and tomorrow's financial requirements of public education are too great for our local and state governments.

The other school of thought believes that the money both can and will be provided by our state and local governments. In support of this position, I suggest these considerations:

First, our state and local governments are financially able to do the job. Even the report of the committee for the White House Conference on Education—and this committee was heavily weighted with those committed to the use of federal funds long before they journeyed to Washington for the conference—could not deny this fact. To cite a specific illustration, consider my own state of Maine, which is far from wealthy. Currently we spend in the neighborhood of \$50 million a year on public elementary and secondary education. But we can afford to spend more *if we want to do so*. A \$7 million increase would raise per capita taxes by just \$12 per year.

Second, great progress already is being made without federal aid. For proof of this statement, get into your car and visit five widely scattered cities and towns, both large and small, anywhere in the United States. Everywhere you go you will find citizens aware of the problem. You will see new school buildings going up and additions being made to old buildings. Look at yesterday's salary scale for teachers in any community and compare it with today's. The progress is marked.

Proof of the progress we are making also is evident in various statistical measures: Since 1900, enrollment in our public schools has gained 102 per cent, while state and local expenditures for these schools have advanced 1149 per cent. Just in the five years from 1950 to 1955, state and local expenditures for elementary and secondary schools increased 73 per cent! We are even cutting into the backlog of classroom shortages. To be specific, the U.S. Office of Education reports that we have added 470,000 classrooms in the last 10 years and that this number is 179,000 in excess of those necessary to meet the increased enrollment needs of that decade.

Third, definite disadvantages in federal aid should not be overlooked. Inevitably it invites increased federal control over our schools, and I use the word "inevitably" after a look at how the granting of federal funds for roads and housing has been followed by increased federal control in these areas. A federal aid program would further the already-too-great expansion of our federal government, an expansion which has seen the cost of operating our national government grow from \$3.9 billion in 1932-33 to a proposed \$71.8 billion for the next fiscal year, an increase of 18 times in 25 years. If we really want to check this growth, we must limit the activities of our federal government to those things which it alone can perform, leaving all other responsibilities to the individual, private organizations, and state and local governments.

Finally, let's not delude ourselves into thinking that federal aid provides a painless way of meeting the needs of education. With limited exceptions, the federal government has no money other than that which it collects from people in the 48 states. All it can do is to collect from the people of each state and then redistribute it. In the long run, it will prove cheaper both to collect and to spend this money within the boundaries of each individual state.

In brief, the financial problems of public education can be solved—and are being solved—within each state. Let's avoid the disadvantages of a federal aid program by devoting our leadership and energy to the programs already under way at the local and state government levels.

LOOKING FORWARD

Church Related

SINCE THE EARLY DAYS OF OUR COUNTRY, CHURCHES have exhibited a strong interest in higher education. The early colleges and universities were church related—Harvard and Yale, for example—and were originally vocational in emphasis, intended "to provide the colony with educated ministers of the gospel." According to Dr. Ernest Earnest in his book "Academic Procession," as late as 1753 the general assembly of Connecticut resolved in reference to Yale: "That one principal end proposed in erecting the college was to supply the churches in this colony with a learned, pious and orthodox ministry."

At a recent meeting of the National Committee of Church Men for Church Colleges, an affiliate of the National Council of Churches, it was pointed out by Methodist Bishop Donald H. Tippett of San Francisco that "in 1636, 100 per cent of the college students in this country were attending a church related college (Harvard). By 1860, the percentage attending church related colleges had dropped to 70 per cent. In 1900, it was 60 per cent. During the period from 1920-47 it was about 50 per cent. And by 1954, only 45 per cent of college students were attending church related colleges."

Many local churches exhibit an abysmal indifference or lethargy in regard to church related colleges. Such colleges are often long on denominational control but short on denominational cash. In the main, the denominations of conservative theological bent are more generous with their colleges than are those of a more liberal theological inclination.

Church leaders frequently are critical of the secularism of many colleges and universities. Interestingly enough, however, they have not been articulate or effective in rallying to the support of their own church related colleges. They haven't convinced their church constituency that such colleges merit support. Such leadership stands indicted by its own neglect.

Status

GLEN TURNER OF COLORADO STATE COLLEGE MAKES pertinent observations in the lead article in this issue dealing with the status of the business officer. He notes that, lacking any central direction or motivation, the college business officer often has been outmaneuvered and may be found out in left field with little or no influence on the progress of higher education.

The distressing aspect of the situation, as Mr. Turner points out, is that the state of being ignored doesn't seem unduly to disturb the average college business manager. As long as the business officer tolerates second-class status he will have second-class impact on the policies of his institution or the objectives of higher education on a national basis.

The comments made by Mr. Turner should be of particular interest to the directors of the National Federation of College and University Business Officers Associations who recently met in Chicago for their annual meeting. These directors are anxious to move in the direction of improving and strengthening the Federation while still "protecting the folks back home" in their regional business officer associations. Most of them are discovering some difficulty in attempting to wear both hats. If it comes to apparent conflict of interest, the regional hat invariably stays on.

As long as strong regionalism exists, in preference to statesmanlike national voice, just so long will the business officer endure second-class status in the national councils of higher education. The business officer has the choice of future status. So far, in too many cases, he's muffed his chances.

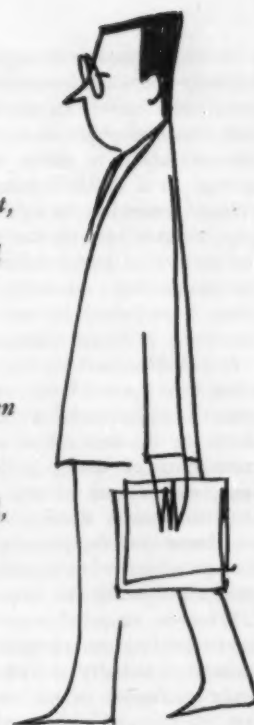
Corporate Philanthropy

WITHIN RECENT YEARS COLLEGE AND UNIVERSITY executives have enjoyed a cordial relationship with the executive personnel of many corporations. This cordiality and understanding have been reflected in the form of corporate gifts to higher education. Industry and education finally have discovered that they need each other.

The assumption has been made by some college administrators that corporate giving is the ultimate solution to the institution's financing problem. In reality, such giving cannot be expected to exceed more than 5 to 10 per cent of the college's total income, judging from the past performance.

In order to appreciate the corporation's position in regard to corporate philanthropy, a reading of the July 22, 1957, issue of the *Bulletin* of the American Association of Fund Raising Counsel would be helpful. It presents excerpts from an address by Richard Eells of the General Electric Company before an alumni group at the University of California in Los Angeles. Copies of the *Bulletin* are available at the A.A.F.R.C. offices at 500 Fifth Avenue, New York 36.

When various educational bodies meet over the nation to plot the future of higher education, are we business officials there? A few of us, yes, but neither our tempering advice nor our constructive judgments have been widely sought. For the most part, the job is under way without us. It is significant that the fundamental research on the financing of higher education, which daily uses our hard-won terminology, cribs our figures, appropriates our piecemeal analyses, is being assembled and interpreted by brilliant men who have yet to deal one hour with the wearisome, detailed meshing demanded in a business staff's operation. We are not being consulted, but what is actually surprising is that we are not surprised about it! That we feel no sense of guilt or annoyance at being outside the blueprint game is a revealing commentary on our appraisal of the scope of the offices we occupy.—GLEN TURNER



Is Our Status Static or Is It Advancing?

GLEN TURNER, Business Manager, Colorado College of Education, Greeley

MY SUBJECT IS "THE STATUS OF THE Profession"; my conclusion is that we have it—but need more; and my advice, in the twisted idiom of those sorely beset, is "Don't just do something, stand there!"

Chester Barnard characterizes status as "that condition of the individual that is defined by a statement of his rights, privileges, immunities, duties and obligations in the organization and, obversely, by a statement of the restrictions, limitations and prohibitions governing his behavior. . . ."

To some extent all college business officers are concerned about their status and a few obsessed by it. The subject is often avoided, however, because overt interest in it sounds unbecoming. A perverse pride urges us to assume the posture of the scholar whose identification with the noble aims and causes of higher education is absolute. The business manager in expansive

moods is the servant of the faculty, the friend of the student, the long arm of the president, the keeper of the treasure, the faithful executor of trusts. Only in nocturnal tossings does he have a private conception of the privileges and prohibitions of his job.

In historical perspective the business manager has dug himself out of that obscure niche he occupied in the college world when Trevor Arnett and Lloyd Morey kicked his reflexes so sharply in the early Twenties. As the sociologists say it: "We have become 'upwardly mobile.'"

Today there is an impressive shelf of profession-inspired literature at our hand, a solid core of tested management technic available for the asking. A curriculum for the training of neophytes and for retreading the already tired is burgeoning in regional workshops. Conferences are providing a healthy interchange of successful experience or are offering an acceptable escape hatch through which the thwarted can exhaust their frustrations.

Through the unpretentious activity of the National Federation of College and University Business Officers Associations a voice is forming. While still conferred with extreme caution, titles and rank more descriptive of function and finer symbols of prestige than those of yesterday are becoming more prevalent. Recruitment for business officerships is now more selective; greater insistence is put upon the carrying of credentials which include sounder preparation, knowledge of the administrative process, and broader sympathies with college objectives.

Fewer men are entering the profession with the singular qualifications that they are the partner of a trustee, the scion of a prominent donor, or the school's all-American quarterback. Men with little orientation toward academic life, who carry the suspicion that students and professors are hardly people, have abandoned the field.

On the campus the business officer is beginning to circulate in a more congenial atmosphere. Students, who as

From a paper presented at the Western Association of College and University Business Officers, Victoria, B.C., 1957.

a lot are forthrightly unimpressed with anybody in the administrative echelons, have been known to ask his advice and, amazingly, even to act on it! Instructors about to invest their \$500 savings in a \$20,000 home, and to obligate themselves for a 30 year mortgage, consult him on the wisdom of the venture. A bursar delivering a tip on income tax minimization sometimes is surprised by the deference reaction a professor displays.

It is evident, nevertheless, that status adjustment has not been uniform. An aura of indispensability has formed about the business officer simply because things go wrong on his rare day away, not because of the vitality of his management. Readers of the surveys know that the perquisites of the business officer, while occasionally very good, are typically not impressive.

Whether compared with his counterpart holding commensurate responsibilities in industry or with deans and senior professors in his own institution, the financial leader's salary, as intended, seldom excites envy. Long hours, foregone vacations, incessant combat with crises, scrabbly assignments no one else feels nasty enough to assume are thought to be normal job attributes both by the business officer and his colleagues. Appropriately enough, the college long ago lost the quiet of the cloister, but the business office seems to have taken on the bustle of a merchandise mart.

CHANGE CAUSES CONCERN

On balance, nonetheless, most elements of status can be noted with satisfaction. The profession of college business management is strengthening. What need inspection *now* are other phenomena more sinister and foreboding. Can it be that an increasing regimen has blinded the business officer to new restrictions on his range? Boldly stated, whether generated subtly or unconsciously, a move is afoot to confine him to the reservation. As his sympathies in educational affairs have widened, his judgments and behavior are impinging on instructional matters. As his powers have plausibly increased, owing to the growing significance of business functions, his influence is spreading over more and more of the college administrative field. The change is causing grave uneasiness.

In three quarters, therefore, means are being found to circumscribe the business officer's activity and to con-

dense his orbit: on the campus inside the executive suite; at the state capital in the executive branch; abroad in the nation's councils on higher education.

Considerable logic is manifest in the internal drive to cut the business department down to size. Some of us are so convinced of the fairness of having peripheral duties shifted out of our bailiwick or so relieved by the loss of awkwardly carried burdens that we welcome a redrawing of those neat squares on the organization chart. Others, noting the enormous expansion throughout our own institution and admitting that its ramifications are just too big singly to comprehend, are reconciled to the creation of divisions unaffiliated with our departments which carry large managerial responsibilities. Particularly where decision making will be done with no more than incidental financial considerations at stake, we watch in resignation or with equanimity important policy formation which campus coordinators declare is extraneous to our department.

Athletics accounting goes off to the men who can better rationalize subsidy; secretarial service agencies slide out to autonomous status; residence halls move over to the dean's care; budget compilation gets a separate office; development work is assigned to a New York firm that "thinks big"; construction auditing leaves to avoid the embarrassment of having the business officer tie down the architect. It is agreed, however, that the distribution of paper clips ought to be firmly centralized in the business officer's hands!

Many of us know, nevertheless, that the skirmishing of satraps around us to acquire greater autonomy and to escape a business oriented scrutiny of their schemes is doing no real service to our institutions. The lasting purposes of instruction, of housing, and of maintenance supervision will not be served by a fragmentation of the business department's authority. The trick here is to see in all our busyness that the lesser involved but acquisitive members of the administrative fraternity do not monopolize the show during the present dramatic growth.

Affairs of state are getting more challenging, too. In the postwar decade the business officer has had to find his way oftener into the political maze. During earlier days when the states were inefficient, when appropriations were minuscule or conveniently copied in toto from one state budget to the next, when the public in its

naïveté assumed that the governing boards of their colleges were best qualified to determine the direction of higher education, the business officer could expect his reports to reveal truth and to reflect need.

This is no longer the case. Our sins of insularity have been discovered; our lack of uniformity in accounting has been exposed; our inspired definitions of exactly what is a student or professor or building have been discredited. While we were meticulously separating capitalized items from operating expenses, when we were worrying about distributing overheads and multiplying our cross-referencing of financial data, someone pulled the rug from under our desks.

OPERATION BANDWAGON

The new technic for corraling dollars is to buttress requests by quantitative comparisons. Appeals are now made through a universal account classification whether it is adjusted to the actualities of the local college organization or not. Operation Bandwagon will bring us a better salary level if Michigan has adopted one; a higher per student support if Indiana edges us; a resplendent physical plant because buildings are said to cost \$20 per square foot at the University of Tecumseh; a more reasonable faculty load if Erewon College has a 1 to 6 instructor-student ratio.

Have we been adroit at this sort of exercise? Are the rules today subject to the judgments and reservations of Volumes I and II of the Manual? Gratifyingly, Yes, in some cases, but not always. There are numerous examples indicating that the business officer has been reluctant to participate in the imagineering of legislative strategy sessions. By staying out, he may be losing out.

Campaigns for funds altogether too frequently are being built apart from the business officer's concerns. Vindication of foundation grants, appeals for federal government funds, and careful evaluation of long-term educational needs are being drafted around us. Yet, the "new look" in financial reporting has done as much as any single factor to underscore the plight of higher education and to stimulate a more realistic voting of appropriations. Perhaps it is time to get back into the act and to guide the ethics accompanying it.

Fortunately, the college business officer has little direct responsibility

for the dilemma of the president when he faces up to the latest decrees of the state's officialdom; his rôle is simply to wrestle with the obfuscating paper work. The treasurer becomes the carrier of bad news about the hampering delays of statehouse clearances, the designer of elaborately rationalized reports expected to justify simple actions. Governing boards that have not challenged encroachments on their authority, college administrations that will suffer inordinate nuisance lest they jeopardize large goals consider pettifoggery worth its costs. The result, however, is that the scapegoat is defenseless when he must relay these annoyances to the faculty, already disgusted by essential interferences.

To the extent that the business officer is identified with the overweening bureaucracy of the day, his stature is being lowered in everybody's eyes. Constitutionally averse to "politicking," the business officer finds it a sour ingredient of his job.

PLAN EDUCATION'S FUTURE

A quite different thing is happening to business managers when various bodies meet over the nation, with much fanfare, to plot the future of higher education. Do we fully realize how wide the university business world has become? Tremendous strides have been taken since 1945 to ready the country's colleges and universities for the enormous tasks of providing a technically more proficient work force, a truly enlightened citizenry, and a perceptive and competent leadership. Commissions, boards, survey teams, prestige holding committees have been appointed throughout the land and are working. These councils are writing the policy monographs for education's future. In doing so, they are using cineramic effects, making estimates of the staggering load to be borne and its costs, devising ways and means of financing the monumental programs visualized, pointing out the steps to be taken in time.

Are college business officers present in these bodies? A few, yes, but neither their tempering advice nor their constructive judgments have been widely sought. For the most part, the job is under way without us.

We are not being consulted, but what actually is astonishing is that we are not surprised about it! That we feel no sense of guilt or annoyance at being outside the blueprint game is a revealing commentary on our appraisal

of the scope of the offices we occupy. While we are designing punch card controls to ration the professor's funds, the Commission on Closed-Circuit Television may be deciding to eradicate the professor!

Although the business officer realizes that the council system may not always be the most efficient, he must soon reconcile himself to an active participation in conference building, for it is only thus that education's mission will be adequately supported.

The frequency with which regular fellows and nice guys have been appearing in our profession is gratifying to everyone. Success in human relations should not blind us, however, to the tough-minded talents called for in our posts. We must also demonstrate a range of thought and a quality of insight much higher than have been traditionally expected of us. A large section of college society has viewed a business officer as a composite of an unimaginative penny-pincher, a plodding bookkeeper, a conscientious bill collector, a genteel red-ink hating conservator—in short, the president's No man.

Unhappily, entirely too many of our preoccupations with the specialties of purchasing, machine accounting, investing, funding, receipting and report-grinding confirm us in that likeness. This stereotype we must break. Too many temptations exist to become mere officeholders instead of administrators.

GUIDEPOSTS LACKING

Where then is the college business officer to look if he would grow in stature in the next decade at something like the same rate established during the last four? Guideposts to the precise roads are lacking, but some indication of direction is possible.

It will not be enough for the college business manager to get underneath the countless small assignments hurled at him because he completes them so creditably. While he is being cooperative and agreeable, he may also become impotent. In matters of primary concern to the financial health of his institution, he must reassert and defend the boundaries of his logically growing jurisdiction.

The department in which the financial V.P. labors obviously will need several divisions and sections and contain more than one level of operations, but it should embrace every regular business function carried throughout

the institution. Machinery for coordination, of course, will be essential in several intrazonal areas; it will be a test of managerial objectivity and sincerity to see where interdepartmental supervision should occur.

It is time again, nonetheless, to lay claim to an authority to direct college activities predominantly of financial interest; to point out to fellow executives the business implications in general college policy quite as often as they tell him that he lacks educational vision. It is time for operations men in college business willingly to participate in the regional and national councils which are mapping new routes in higher education and to earn the right to speak there because of the experience and research invested in the effort. It is time to join cooperatively with other educational strategists in institutions similar to one's own who are lifting the public's sights to the immensity of the money requirements which face the colleges and universities of the land.

NO TIME FOR FALTERING WILLS

The present is no time for faltering wills. Harried as our lives are, engrossing as the current involvements may be, this is not the hour for a further fragmentation of our offices or an abdication from the obligations of business character running through the educational venture.

In the epigram of Sir Josiah Stamp, "The price of pace is peace." When unsettling ideas are abroad, when experimentation is revered almost for its own sake, when worth is attributed to a program because of the prestige of the agency that broadcasts it, business officers must join gladly and vigorously with the now prominent groups who will shape the future of higher education. For the next several years, professional growth will not be measured by further specialization and a narrowing subscription to finely balanced routines; it will occur only when we become practical theorists and humanistic philosophers who declare our province to be everywhere in the university frame where business and financial problems arise.

The profession we built already holds an honorable status. To advance it, a truer knowledge of higher education's rôle and our own capacity to implement it will surely be needed.

In the current frenzy to accomplish that which is urgent, let us not fail to do that which is important! #

How 25 colleges have distributed their holdings

Long-Term Investing

J. HARVEY CAIN

Consultant on College Finance, Washington, D.C.

MOST COLLEGE BUSINESS OFFICERS are familiar with the list of 50 favorite common stocks found in the portfolios of investment trusts. To a large extent the same favorites are included in the investment lists of insurance companies, banks and other fiduciaries. For the purpose of this article an examination has been made of the financial reports of 25 large colleges and universities as of June 30, 1956. Listed in the table on page 23 are 100 stocks held as investments of endowment funds by 10 or more of the institutions whose reports were examined. Those held by 15 or more institutions are marked with an asterisk.

It has become fashionable in recent years to play down the importance of endowment income to colleges and universities because of the rapidly changing pattern of financial support. Endowments have been described as old-fashioned, and many would like to spend the principal of these funds for current purposes or for building purposes.

Due credit must be given to the wonderful accomplishments of alumni associations, especially in some of the older and well known universities where graduates have accumulated money and are willing to share it with alma mater. Unfortunately, the heavy financial obligations of many alumni do not permit large gifts. Contributions of other alumni have consisted of small restricted gifts set up as memorials, and these, instead of being helpful, really add to the institutions' administrative expenses. What the colleges desperately need are unrestricted gifts. Annual giving programs have been accorded a well merited place in educational financing. In fact, it is desirable for all colleges to have a good fund raising organization, because no matter how much money is collected it will not be enough.

THE 25 COLLEGES

Amherst College
Bowdoin College
University of Chicago
Cornell University
Dartmouth College
Harvard University
Johns Hopkins University
Massachusetts Institute of Technology
University of Michigan
Mount Holyoke College
University of Minnesota
Oberlin College
Ohio State University
University of Pennsylvania
University of Pittsburgh
Princeton University
University of Rochester
Tufts College
Vanderbilt University
Vassar College
University of Virginia
Wellesley College
Wesleyan University
Western Reserve University
Yale University

Nevertheless, endowment funds will be with us for some time to come. They add to the stability of total college income. The American public and, in fact, the educators are not yet ready for a radical change in the financial pattern, which is coming faster than we think.

Endowment earnings increased 113 per cent in amount (from \$60,902,567 to \$141,160,026) between 1931-32 and 1953-54. However, during that period endowment income decreased from 13.5 per cent of total college income to only 4.3 per cent. In the year 1953-54 endowment income represented 8.58 per cent of total income in private institutions and 0.89 per cent in public institutions. While endowment is playing a less important rôle in financing higher education, as

pointed out by Henry G. Badger in the Biennial Survey of the U.S. Office of Education, the total sum of endowment principal, \$3,196,120,125 reported for 1953-54, is very substantial. It earned \$141,160,026 on book value, or at the rate of 4.42 per cent. Also for 1953-54, the latest figures available, 53 institutions reported endowment funds principal of more than \$10 million. The importance of the income on these funds is still of major concern to this group of institutions, as well as to the large group of institutions with endowment funds principal of less than \$10 million.

The principal of the endowment funds of the 25 institutions studied increased 21 per cent in the biennium, 1954 to 1956. The rate of return on book value was slightly above the 4.42 per cent mentioned. The market value of these funds was an estimated 60 per cent higher than book value, which would give a rate of return on market value of approximately 3 per cent.

At various times through the years proposals have been made to have a number of colleges join in establishing an over-all investment service. But the conclusion has been reached that there would be danger in concentrating judgment concerning too many trustee funds, and that it would be better to have each institution use its individual judgment in the making of investments.

The soundness of this decision has been proved in the success of the colleges and universities in administering their own funds. Their progress has been the envy of insurance, mutual fund, and other investors throughout the country. They have shown excellent judgment and skill in seeking out progressive companies with good management and in purchasing stocks when the time was ripe. They have also shifted to bonds when market

conditions seemed to recommend that course.

No figures have been collected or are available through national organizations describing the investment holdings of colleges and universities. The investment firm of Vance, Sanders and Company obtained figures from 39 colleges and determined that on average the portfolios comprised 54.8 per cent in common stocks (market value) as of June 30, 1956. Not all of these institutions publish reports available to the public that contain lists of securities showing both book and market values.

The securities held by the 25 institutions listed totaled \$1,465,000,000, of which \$592 million, or 40.5 per cent, was invested in common stocks (book value). There were 675 different issues of stocks listed in the portfolios. Also, there were about 50 stocks of strictly local companies not listed on the exchanges. Stocks held were: 91 utilities, 70 banks, 46 insurance companies, 40 oil companies, 34 gas companies, and 30 chemicals. Of the 675 issues, the main categories (65 per cent) were distributed percentagewise as follows: public utilities, 18.5; oils, 18.5; chemicals, 7.5; insurance, 5.2; natural gas, 4.9; banks, 4.2; steel, 2.5; paper, 2.3, and finance, 1.4.

The nine most popular stocks held by nearly all the institutions listed were: American Telephone, DuPont, General Electric, General Motors, Gulf Oil, Kennecott Copper, Sears Roebuck, Standard Oil of New Jersey, and Union Carbide.

There is no set pattern. Several institutions held no bank, insurance, financial or steel stocks. One or two had large holdings in these issues. One had large holdings in steel, but for the most part individual blocks were small. Industries that seemed to hold little attraction for the colleges were aircraft manufacturers, airlines, beverages, coal, confectionery, household equipment, department and variety stores, radio and television, motion pictures, shoes, sugar, textiles and tobacco.

It is not the purpose of this article to recommend to investors that they purchase any of the 100 stocks listed without careful consideration of present market value and yield, and especially future prospects for stocks for each industry, as well as the individual companies. The usual cautions to all investors still apply. It is also a good time to look for bargains in sound bonds.

#

Favorite Stocks of 25 Colleges and Universities

Those marked with (*) indicate stocks are included in list of first 60 stocks

AGRICULTURAL MACHINERY

*International Harvester

AUTOMOBILES

Chrysler
Ford
*General Motors

BANKS

*Bankers Trust, New York
Chase-Manhattan, New York
Chemical Corn Exch., New York
*Cont. Ill. N.B. & Tr. Co., Chicago
*First National City Bk., New York
First National, Boston
First National, Chicago
Guaranty Trust Co., New York
Manufacturers Trust Co., New York

BUILDING SUPPLIES

*Johns Manville
*Minneapolis Honeywell
U.S. Gypsum

CHEMICALS

*Allied Chemical
*American Cyanamid
*Christiana Securities
*Dow Chemical
*DuPont
*Eastman
*Monsanto
National Lead
*Pittsburgh Plate Glass
*Texas Gulf Sulphur
*Union Carbide

CONTAINERS

American Can
Continental Can
Owens Illinois Glass

DRUGS

*Merck & Co.
Pfizer & Co.

ELECTRICAL EQUIPMENT

*General Electric
*Westinghouse

FOOD

*Corn Products
General Mills
National Dairy
*United Fruit

INSURANCE

*Continental Ins. Co.
*Firemen's Fund
Great American
Hartford
*Ins. Co. of No. Amer.
U.S. Fidelity & Guarantee

MACHINERY

*Caterpillar Tractor

MERCHANDISING

*Montgomery Ward
*J. C. Penney
*Sears Roebuck & Co.

METALS

Aluminum Co. of America
Aluminum, Ltd.
*International Nickel
*Kennecott Copper
New Jersey Zinc
*Phelps Dodge

NATURAL GAS

*American Natural Gas
*Consolidated Nat. Gas
El Paso Nat. Gas
Northern Nat. Gas
Pacific Lighting
Panhandle Eastern P.L.
Peoples Gas Light & Coke
Tenn. Gas Transmission
*United Gas Corp.

OFFICE EQUIPMENT

*International B.M.

OIL

*Continental Oil
*Gulf
Ohio
*Phillips Petroleum
Shell
Socony Mobil
*Standard California
*Standard Indiana
*Standard New Jersey
*Texas Co.

PAPER

*International Paper

RAILROADS

*Atchison Topeka & Santa Fe
Chesapeake & Ohio
*Union Pacific

RUBBER

B. F. Goodrich Co.

SOAP

*Procter & Gamble

STEEL

Bethlehem Steel
Inland
*National
U. S. Steel

UTILITIES

*American Gas & Elec.
*Central & South West
Cleveland Elec. Illum.
*Commonwealth Edison
*Consumers Power
*Gulf States Utilities
*Houston Light & Power
*Illinois Power
*Middle South Utilities
*Niagara Mohawk Power
*Pacific Gas & Elec.
*Southern Cal. Edison
*Texas Utilities
Virginia Elec. & Pr.
Wisconsin Elec. & Pr.
*Amer. Tel. & Tel.

Short-Term Investing

Why not put idle funds temporarily to work,
as corporation treasurers do? There is no reason
colleges should not do this; in fact,
they have even greater incentive to do so, as
they need every dollar they can get.

C. JOHN KUHN

Vice President and Treasurer, C.I.T. Financial Corporation, New York

TODAY FEW GREAT FORTUNES CAN be tapped for the establishment or maintenance of universities, so these institutions must turn increasingly to other sources of income. Highest among these alternative sources is industry.

When a university turns to a businessman to ask him to contribute individually or to allocate a portion of his corporation's earnings to the university, he is asking quite a lot. The businessman has been conditioned to think of universities as among our most important assets and is today more than ever willing to listen to a plea for funds. But he is in a dilemma. He cannot judge the excellence of, nor should he be expected to pass judgment upon, the quality of the teaching or the research of an institution. This is the task of the academic community.

AN APPROACH TO BUSINESS

But the businessman can and does pass judgment on the ability of the university to administer its finances. He knows something about investments and comparative yields. And he instinctively turns to this area as his guide to the efficiency of the operation. This is one point on which he feels he has something in common with the university. If he is, or is to be, a financial supporter, his judgment as to whether his funds will be wisely invested or dissipated will be important in determining the extent of his gifts, if indeed he does not refuse to give at

all because he feels that his funds may not be properly used.

If he can be convinced that the university can handle its funds as well as any other organization, he is obviously a much easier target for contributions to a particular institution or to the university system as a whole. Certainly the matter of a bequest provision in a will is aided and stimulated by good financial management, a field often neglected because of its unknown and often currently unseen results.

This approach to business support cannot be overstressed. Often university officials as a whole tend to live in a world of their own without understanding the motivations and fears of the business community. Some of our institutions of higher learning do take this question seriously and are sensitive to the criticisms of businessmen, but it behooves all university officials to take this into consideration for the same reasons. Some fear the intrusion of dictation of academic policy by well meaning but unknowing business supporters, but it is virtually a truism that the sounder the financial program, the greater the autonomy. Greater appreciation of a wise and well run administration of practical affairs in a university begets a greater belief in the value of academic freedom in the university world.

To obtain this appreciation makes the job of the university financial official a difficult one. Everyone thinks that he knows the university financial

officer's job as well as that man himself. Men who would be reluctant to tell the dean whether to hire this professor or that, or to pass judgment upon the curriculum, will have no hesitancy in criticizing the financial operation. This may be shortsighted of the businessman, but it certainly indicates the need for top-grade administration of university funds.

The corollary of this focus of criticism on the university finance officer or treasurer is that the president or the board of trustees must be alert to have or to pick the best man available for the job. Often the task is assigned to someone on the staff whose experience is in other fields, and often too little is paid to attract the services of a capable man. Salaries of collegiate finance officers often are based upon a professorial salary schedule. They should be more competitive with salary schedules of similar jobs in business, for the university treasurer is one of the key men in a growth industry. Without adequate financial capacity and ability in that job, the growth can be impeded.

GREATEST USE OF CURRENT FUNDS

Competent handling of current funds comprises one of the areas that is both subject to scrutiny by business contributors and susceptible of producing added income. This is the area I am singling out, although I am aware that I am omitting any number of others of importance. However, neither

Table 1—Short-Term Investing of Tuition Payments

Purchase Date	Cost of Note	Discount Rate	Effective Yield	Maturity Dates					Int. Earned (diff. between cost & face value at maturity)
				Mar. 1	Apr. 1	May 1	June 1	July 1	
Feb. 1	\$ 99,747.22	3 1/4 %	3.26 %	100,000					\$ 252.78
Feb. 1	99,467.36	3 1/4 %	3.27		100,000				532.64
Feb. 1	99,165.62	3 1/4 %	3.40			100,000			834.38
Feb. 1	98,875.00	3 1/4 %	3.41				100,000		1,125.00
Feb. 1	98,593.75	3 1/4 %	3.42					100,000	1,406.25
	\$495,848.95								\$4,151.05

Table 2—Short-Term Investing of \$1 Million Gift for Construction Purposes

Purchase Date	Cost of Note	Discount Rate	Effective Yield	Maturity Dates					Int. Earned (diff. between cost & face value at maturity)
				Apr. 1	June 1	Aug. 1	Oct. 1	Dec. 1	Feb. 1
Jan. 1	\$ 74,367.19	3 1/4 %	3.40 %	75,000					\$ 632.81
Jan. 1	98,584.37	3 1/4 %	3.42		100,000				1,415.63
Jan. 1	146,908.33	3 1/2 %	3.57			150,000			3,091.67
Jan. 1	170,023.44	3 1/4 %	3.86				175,000		4,976.56
Jan. 1	192,809.72	3 1/4 %	4.01					200,000	7,190.28
Jan. 1	200,000.00 (And Int.)		4.00						8,800.00
	\$882,693.05								\$26,106.95

Rome nor the university system was built in a day; if we can solve one problem at a time, we will at least have made some progress.

In this discussion, no consideration will be given to the problem of investment of endowment funds. I understand that controversial subject is being covered in great detail elsewhere in this issue. Sufficient for this purpose to say that, under the conditions we have known for the past generation, short-term investments of the character discussed here have no place in a permanent investment program. Endowment or permanent funds, in my opinion, should always be fully invested under the "going-rate theory." Any attempt to gain by temporary investment usually results in no long-range gain or in disaster. Temporary or short-term investment is a function applicable only to current funds or funds with a future deadline of use.

Whereas patterns of over-all financial operation among colleges and universities vary over a wide range, one pattern fits all cases under discussion: Cash earmarked for expenditure is cash on which some earning power is possible. Whether it is derived from endowment income, tuition and fees, annual giving, or institutional or research grants, it is cash designed for expenditure during the months and year ahead. Cash planned for construction is also current cash, unless being accumulated for projects years in advance. In this sense, the prob-

lems of the college treasurer are similar throughout, whether the institution is large or small, tax supported or private, with or without endowment.

In most instances, cash income can be forecast or budgeted within a small degree of error, as can expenditures. Again, in many cases, cash income is received in sizable lumps over a short period, e.g. tuition income, whereas expenditure of that cash is usually spread over the several months to follow. The latter fact is true even where unanticipated gifts or grants are received. Generally, bank accounts are fat at the beginning of the academic year and dwindle down until fattened up again as spaced tuition payments or other large sums are received. There are plenty of exceptions to this, of course, particularly in tax supported institutions where grants may be delayed, or where a treasurer must worry over the results of an election or the annual alumni campaign. Each treasurer will have his own set of problems, but his pattern of expenditures will be largely the same, once the cash is received.

Here the element of planning enters in. He would be an incompetent corporate treasurer who fails to program his future income and his future expenditures. Those who do not are always in a position of having excess reserves for emergencies, and the emergencies are often of their own making.

The collegiate treasurer may have

as many variables with which to contend, but programming is as possible for him as for any financial officer, based upon past experience and forewarned judgment. While income projections may be wide of the mark, expenditures contain fewer unknowns. The very first point in a good university financial administrative system is good planning of income and outgo.

The second point is the desirability of maintaining a minimum of idle cash on hand—based upon a planned program of expenditures plus a small reserve—in order to use the remainder to produce income. Too often cash is held even though it is known that it will not be needed for several months. That cash should be at work and in too many cases it is idle because of a fetish for the wrong concept of liquidity.

The theory of being constantly at full investment level in an endowment fund should apply likewise to current funds. Excess cash held as cash with no earnings flowing from it in these days of availability of short investments in many flexible forms is a hidden drain on resources. With a wide choice among prime short-term investments running from 30 days to nine months, substantial added income can be gained. This is possible at any stage of the money market, and is especially true during these days of high short-term rates.

As a result of local pressures, or in an attempt to maintain "proper" town and gown relations, college treasurers frequently scatter bank accounts throughout their own and neighboring communities. None of them may be large, but when added together could make a respectable sum, the possible earnings on which could well pay the salary of an assistant professor or more. No sum is too small to invest in the short-term market. Illustrations abound of small corporations being intermittent investors in amounts of from \$5000 to \$10,000.

Funds in hand for a building program, either in progress or in the planning stage, are easily taken care of in a short-term investment program. A construction progress and payment schedule indicates future deadlines. Short-term paper to meet those dates is easily procurable. Even though actual dates are sometimes nebulous, a steady roll-over of 30 day investments will obtain the liquidity desirable for the purpose. This system is sometimes ideal for obtaining earnings from cash

held for any purpose whatsoever, since changing circumstances always will permit a change in short-term investment planning every month as the investment matures. Frequently, building programs include several small funds, kept in separate construction accounts, which can be pooled to sizable figures and show a not insignificant earning power.

Let us take an oversimplified hypothetical case and reduce it to specific terms. For the purpose of this illustration, assume tuition payments alone of \$500,000 due and received on February 1. Disregarding other income and/or cash on hand, assume an expenditure schedule of \$100,000 per month for the next five months. On this premise, \$100,000 could be invested in each of five short-term notes maturing in one up to five months. At rates prevailing at the time this is written ($3\frac{1}{4}$ per cent for 30 to 89 day notes; $3\frac{3}{8}$ per cent for 90 to 179 day notes) and, assuming the purchase of discount notes, \$495,848.95 total would be used initially for the purchase of the notes, with a total of \$500,000 being paid back over the period. The difference of \$4,151.05 represents interest earned, as shown in Table 1 on page 25.

If this operation can be employed twice a year with tuition payments, this is not too bad as a simple procedure to add more than \$8000 per year to income. That's worth an addition to endowment funds of \$200,000 at a 4 per cent return, not to be ignored even by larger institutions. Divide or multiply that \$500,000 figure by the amount available from tuition payments twice a year and the loss to income by holding it all in cash is self-evident.

The same practice can be followed with endowment income if interest and dividend dates happen to bunch up; with gifts or grants for specific purposes, and it is beautifully adaptable to funds on hand for construction purposes. In most cases, a year or two elapses between the time a building fund grant or gift is received and completion of the building.

Let's assume, for ease of illustration, a \$1 million gift for construction of a building for which plans already have been drawn. We'll allow \$100,000 to meet expenses already incurred. That would ordinarily mean no added expenditures of importance for the next two or three months, followed by a rising scale of progress payments to completion at the end of one year

with 20 per cent of the total to be paid one month after acceptance. On these premises, the picture would look something like the one in Table 2.

That additional \$26,107, which is equivalent to a new gift, can go a long way to cover unanticipated costs, the cost of equipment, or other needs.

Now, admittedly it is not quite as simple as it appears here. The technique of short-term investment is easy, but the determination of amounts available and the maturities to be purchased is much more difficult. But again, this is a function of good planning after all the factors have been sifted and allowances made for enough cash on hand, emergencies and so forth. And if the uncertainties cannot be resolved, 30 day (and sometimes shorter) notes can be purchased and rolled over for another similar period in decreasing amounts with the same end result.

SHORT-TERM INVESTMENTS

In recent years the short-term investment market has broadened considerably with a pronounced increase in activity. The best known mediums are U.S. Treasury bills and sales finance company commercial paper. There are others, such as short issues of government agencies—the Federal Intermediate Credit, Home Loan, and Land Bank notes—but their availability does not meet our purpose and their markets are often quoted at wide spreads. Added mediums, such as repurchase agreements, have technical disadvantages. Savings, or time, deposits have a function, but not for this purpose.

U.S. Treasury bills are used widely by corporations, partly because "they look good on the balance sheet." They would meet the purpose under discussion here, and perhaps should be used in part, but they do have some inherent disadvantages. Their yield always is lower than that of sales finance paper; they cannot always be purchased to meet an exact scheduled maturity date; purchase always involves some market risk in the event of sale before maturity. They are, nonetheless, rightly considered to be as good as cash.

What is not as well known, but what happens to be an historical fact, is that the sales finance commercial paper of the top companies also is as good as cash. This type of paper has never suffered a default, nor even a rumor of one. Its self-liquidating feature, backed by huge capital, makes

it virtually impregnable. Its prime quality as a credit instrument has become more widely recognized during the past few years, to the extent that the amount of paper outstanding of the five top companies which report to the Federal Reserve Board has increased more than twentyfold since 1946 to the present level of approximately \$2 billion. Most of this total is purchased by corporate treasurers, including those of virtually all the leading companies in the country, for the very purpose under discussion here.

Beyond its equal safety, commercial paper directly sold by a sales finance company yields a higher return, and, very importantly, can be purchased ahead of time to start earning interest on any given date and to mature on any business day chosen by the purchaser. Thus, by forward planning, this medium provides a simple method of tying precise purchase and maturity dates to any given short-run program. Moreover, liquidity is obtained without concern as to fluctuating markets.

In emergencies, the sales finance companies, while they cannot guarantee to do so, have been known to redeem paper ahead of maturity in case of legitimate need. To my knowledge, no such request ever has been rejected except in cases in which the buyer wants his money in order to invest in something else. Purchase of such paper is simpler than entering an order to buy other securities. One telephone call to a bank or directly to the office of one of the major companies is all it takes.

CONCLUSION

In the past few years, corporate treasurers have learned a great deal about putting idle funds temporarily to work. They have reduced the amount of their cash, which yields nothing, to near zero by keeping just enough on hand to meet minimum daily needs. This cash has been replaced by short-term investments that yield an income, are safe, and whose return to cash without risk can be timed to the precise date of the need. Moreover, the banking system does not lose in the process.

There is no reason why university treasurers should not do the same thing. Indeed, they have an even greater incentive to do so, as their institutions need every dollar they can get, and an efficient financial administration is the best selling point to use to tap corporate giving to universities.

THE BURSAR'S DIVISION OF THE BUSINESS office of a large university asked the auditors to take a look at a loan account that had been funded by a governmental body.

Although this account was relatively inactive, it was a constant source of work and worry for the supervisor of loans. Furthermore, it represented agency money from which the university or any of its students could not realize additional benefits of a direct nature. And though the money remaining in the account was only one-ninth of the total to be accounted for, the remainder was commanding more attention than its importance by occupying a separate line in the balance sheet in the annual report of the vice president and controller.

The original sum of the agency money was provided in order that certain students might, through finishing scholastic activity, fulfill a need. The university carried out the purpose of the account by granting loans from it to qualified students.

The university administered principal and interest additions or charges to the subsidiary accounts under the names of the borrowers, also payments or credits, and collections. Principal and interest collected were returned to the governmental unit. There was no responsibility for collateral since none was required.

Because, of course, properly executed notes were received in exchange for the loans, the procedural steps for a notes receivable audit, as modified by the circumstances of the particular problem, were employed.

AUDIT STEPS

1. A notes receivable schedule was prepared allowing columns for general note information, principal additions and deletions, interest additions and deletions, audit recalculation of interest, note cancellations and reasons therefor, unpaid note balances, adjustments and/or corrections.

2. An additional schedule of unpaid notes receivable was prepared giving a further analysis of note detail and including columns for aging, date of last payment, and reasons for non-payment.

3. The correspondence behind all notes was examined. Correspondence relating to unpaid and/or delinquent notes was summarized. (A separate correspondence file was maintained for each borrower.)

4. Each note was inspected gen-

Continuing a series of
articles on the subject:

Auditors Aid Administration

4—Accounting for Notes Receivable

A. E. MARIEN

Internal Auditing Division
University of Illinois

erally; accounted for by serial number.

5. Unpaid notes were inspected in specific ways such as comparison of the student's signature, address, course of study, and so forth with records in the registrar's office.

6. Subsidiary account balances were reconciled with controlling account.

7. The total of principal and interest for retired notes was compared with the total of collections returned to the governmental unit.

8. Unpaid note balances were confirmed as of a certain date by requests for confirmation being mailed to the borrowers concerned.

9. Statements for reporting purposes were prepared: one, a summary of the operations for the agency account; the other, an analysis of the account balance by subscheduling concisely the unpaid notes.

In addition to the foregoing steps, the stipulations set up by the governmental body for handling the original money granted were studied in detail.

In carrying out the additional audit step just stated, the solution to the problem was discovered. One of the governmental specifications was that, though the agent for the money provided was responsible for the collection of the loans and interest, the agent was not to be held finally responsible for delinquent loans when diligent collection procedure had been exercised. The correspondence behind delinquent notes, as well as note confirmations, demonstrated a diligent collection procedure and a poor credit condition of the borrowers.

Furthermore, only 28 per cent of the requests for confirmation were returned by the borrowers still owing principal and/or interest on the notes.

The auditors suggested that all unpaid notes be turned over to the governmental body for final disposition.

Subsequent to the suggestions of the administration aiders, the supervisor of loans sent a letter to the governmental unit requesting permission to return the unpaid notes. The agreement reached was as follows: (1) two unpaid notes being actively paid upon were retained; (2) the remaining notes, delinquent and inactive, were returned to the source of the agency money along with pertinent records.

Again the auditors had given aid to management, aid of a positive or constructive nature, or, in other words, aid that proved to be effective. A good attitude on the part of an auditor to make him effective is for him to investigate with helping as the primary motive. Employing "What can I find wrong?" as a chief motive often leads to negative results. Especially is this true in reviewing the past transactions of a college or university because of the high caliber of personnel that one usually finds there.

One element of the recommended solution to this case was contrary to a policy of the university's auditing division. The auditors believe that, in an educational institution, auditing results should not conflict with the best in the way of character development for students or staff. In this problem of notes receivable, they were confronted with the idea that students should be taught to be honorable in their business transactions and to respect legitimate debts.

The evidence that was examined in this case, however, clearly revealed that further efforts of note collection would prove to be of no avail. #

Seminaries Are "Special" When It Comes to Finances

JOHN A. BAIRD Jr.

Assistant to the President
Eastern Baptist Theological Seminary, Philadelphia

"WE NEED MORE MONEY!" IS THE universal cry of almost every independent educational enterprise, and this is particularly true of theological seminaries, like Eastern Baptist Theological Seminary, Philadelphia.

Eastern, in company with most of the other 77 accredited members of the Association of American Theological Schools, is striving to prepare mature, trained men to shoulder the responsibility of administering churches, working on the foreign mission field, serving in the chaplaincy, and teaching in our universities, without charging a penny of tuition as such!

This tradition in theological education requires extreme financial dexterity on the part of the entire administration, particularly the business office. It means that other sources of

income must be provided and that the funds available must be handled with twice the care exercised by the financial officers of other colleges and graduate schools of law or medicine.

Gift support from individuals and churches is vital both for unrestricted use toward current expenses and for the building of endowment principal. While it is the responsibility of the public relations-development office to procure this gift income, a close relationship exists between this group and Eastern's business administration. While "you must spend money to raise money," the business office has made a real contribution to making this procedure a frugal one.

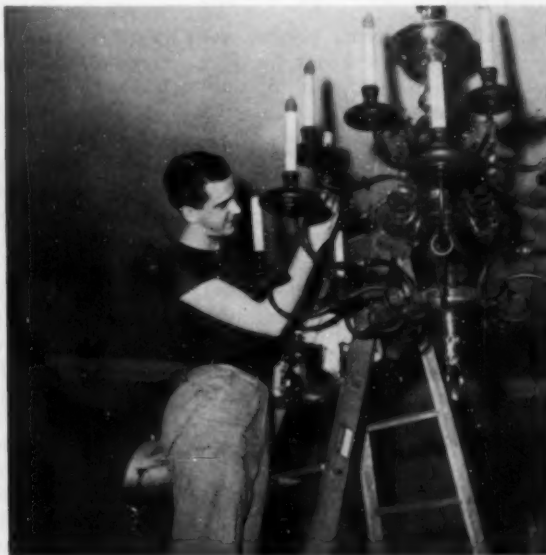
A law student or a medical student looks forward to a career of above-average earning power. As a result, he

often borrows money to pay for his education and living expenses during the period required to earn his degree. A seminarian looks forward to a lifetime of low salary, hence, cannot "mortgage his future" for three years of study. The result is that although Eastern charges certain academic fees and, of course, bills students for room and board, at the present time the seminary does not receive tuition income as such.

Imagine the burden this places on an administration providing high quality instruction in small classes, with up-to-date equipment!

A large part of seminary life is devoted by students to gaining practical experience in church management through field work. This provides an excellent balance to academic en-

Seminary students often come to campus with families. Student polishes chandelier as part of work scholarship.



deavor, but, by necessity, limits the job opportunities open to him.

The seminary compensates for this hardship by careful investment of endowment principal to assure maximum income commensurate with safety, by maintaining a loyal staff whose members look upon their responsibilities as a Christian service rather than merely as a job, and by frequently "doing the impossible," and also by utilizing the services of many volunteer workers.

These volunteers are divided into three groups: trustee committees, faculty wives, and a women's auxiliary of a thousand members.

Unlike the members of many boards, Eastern's trustees are extremely active. Many committees of the board meet monthly, and most of these men visit the campus frequently and are familiar with every phase of seminary life. Particularly in matters of business administration and fund raising, they are invaluable.

FACULTY WIVES HELP

A number of faculty wives also perform helpful tasks which contribute to the operation of the school. They do part-time work in certain offices, handle decorations for lounges and common rooms, and assist in many ways at public functions.

Eastern has a strong women's auxiliary, which assumes the financial responsibility for furnishing and redecorating several common rooms, lounges and study areas each year.

Seminary students are different! While some ministerial candidates ar-

rive at Eastern with a crewcut and a fresh diploma, many begin their seminary education virtually "middle aged." Often these embryonic ministers have devoted years of their lives to the pursuit of other careers. This means that they are more mature and experienced and will make better pastors in less time than their more youthful classmates, but it creates problems for the business office.

Men in their thirties and forties, usually with wives and children, are relatively free from the temptation of campus high jinks and student pranks. They also are sensitive about requirements and regulations, which seem to them designed for children. Dormitory rules frequently irritate them. Fire drills, building security rules after hours, parking restrictions, and many other aspects of institutional life are not accepted automatically.

In our age of almost universal automobile ownership, made doubly necessary at our seminary for students by the vigorous program of field work, enforcement of parking regulations is a constant problem for the business office.

Because of the necessity for family support and the travel requirements of their field work, many students are unable to accept campus work opportunities. They seek high paying factory work which, while understandable, further complicates the seminary's problem of getting repair and maintenance help.

A partial solution to many of these difficulties is found by establishing,

insofar as is possible, a personal contact between administration and the individual student. Theological seminaries in America are relatively small and this permits a closer relationship than would be possible in a large school.

Eastern, like most of the seminaries, is not located in a trailer-camp neighborhood. Family apartments, and even playground areas for children, must be provided on the campus or immediately adjacent.

Most students attend theological seminary because they feel a deep motivation toward Christian service and this is as it should be. However, this zeal and commitment frequently becomes so contagious that the administration of the seminary finds the staff personnel, including office workers and even maintenance men, imbued with the same spirit. The result is that their jobs are no longer jobs. This can result in a higher standard of work than is ordinarily found, or it can mean that performance suffers.

PART OF SEMINARY EXPERIENCE

Take the matter of campus extra-curricular activities, such as chapel services, lectures by guest speakers, and concerts. These events are designed for students as part of their seminary experience, and most of them take place during the business day. When a secretary in an academic office gets "special permission" to attend some of these programs and services, office morale suffers, and work is neglected. One stenographer even joined the seminary choir!

There is also a tendency for employees to judge their fellow workers on the basis of their religious experience and attitudes, rather than by ability and performance. This becomes evident occasionally when a department head condones mediocrity because of sympathy or compassion for a subordinate's personal problems.

Despite these handicaps, the business administration of a theological seminary has many compensations. Problems of actual dishonesty are virtually nonexistent. Opportunities to acquaint students with sound financial practice are many. Each member of the administrative staff has the satisfaction of knowing that he is a part of one of the most important tasks of our time—the education and training of intelligent and alert spiritual leaders for today and tomorrow!

It's a glorious undertaking. #

Student volunteers help with heavy mailings and other seminary work.



Student Organization Accounting

HELMUT O. WILK

Internal Auditor, Drake University, Des Moines, Iowa

ONCE UPON A TIME THERE WAS A king. He had a beautiful daughter. She was in love with a handsome but poor fellow. The king did not like him but, not to anger his daughter, he pretended to agree to the marriage. But first he told her: "I will put him through a test to find out whether he is worthy of you." He called the young man and said: "Here are 100 wooden pegs, all different in thickness; here is a board of steel with a hole in the center, and here a blunt knife. If you can get all these wooden pegs through the hole using only the blunt knife, if necessary, I will give you my daughter."

More than half of the pegs were so thin that he had no trouble at all; then there were about 20 of them that he had to push, to pull, to squeeze in order to get them through; then, using the blunt knife, he managed to pass another dozen through, but there were still some left, too thick and too hard. Poor fellow, if he has not died in the meantime, he is still a bachelor.

SITUATION TO BE FACED

This is the situation you will have to face when confronted with the task of auditing the records of student organizations. Then you will meet them all: the cooperative, friendly, eager-to-learn and easy-to-handle type; the ones you have to persuade, to have patience with, to plead with; the ones who are stubborn, obstinate, argumentative, but after the "blunt knife" treatment (threat to report to faculty adviser or disband the organization) are willing to yield, and last and the least, the rebellious, irresponsible, overbearing, defiant ones who could easily "pass

through the hole" but blow themselves up just for spite.

There is an easy way out. You can hire a bookkeeper and put him in charge of the records of all student organizations. However, we, at Drake, do not favor this solution. We think

we should give our students every opportunity to face responsibilities and to cope with them. We also think there is a great need for education in this field and that it should be carried into our educational program. Placing these responsibilities in unskilled, inexperi-

PAID BILLS

from

to

EXHIBIT B

Receipts				Expenses			
1955				1955			
9/15	Receipts #1-3	2.50		9/15	This book	1	.35
9/16	Receipts #4-7	4.50	7.00	9/16	Refreshments	2	1.25 1.60
9/19	Receipt #8	1.00		9/25	Postage	3	1.00 2.60
9/20	Receipts # 9-12	3.00	11.00				

EXHIBIT C

Membership Roster				1st Sem.		2nd Sem.	
1955/1956							
1	Robert Black, City, Dorm	\$	00				
2	Irene Blue, Slater, Iowa	1	00				
3	Henry Brown, City,	\$	00				
			50				
4	Nancy Green, Mitchelville	\$	00				

EXHIBIT D

EXHIBIT E (Checkform with Stub)

No. _____ \$ _____	19 _____ No. _____
_____ 19 _____	FIRST FEDERAL STATE BANK
To _____	Pay to the _____
for _____	Order of _____ \$ _____
Balance \$ _____	_____ Dollars
Deposit \$ _____	
Total \$ _____	
This Check _____	
Balance _____	

enced hands, we realized the necessity for education, training and supervision.

To ascertain the efficiency and honesty of organization accounting and to determine the extent of assistance needed, we called on all treasurers, those of fraternities and sororities (social groups) excepted, to submit their books for audit. This was in the spring of 1952. We thought at the time that, because of their individual and more complicated bookkeeping

1															1
Date	Explanation	#	BANK		RECEIPTS					EXPENSES					
		Chk	Dep.	Wdrls.											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	

EXHIBIT F

CLASSIFIED CASH RECORD

line	Date	Explanation	# ch	Bank		Receipts					Expenses				
				Deposit	With drawls	Init. Fee	Dues	Jewel- ry	Proj. A	Misc.	Nat'l Office	Meet- ings	Jewel- ry	Proj. A	Misc.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	9/1	Balance		100*											
2	9/15	Receipts # 1-8				45	10	9							
3	9/15	Drake U., This book	1		1										1
4	9/17	Receipts #9-12				15	5	3		1					
5	9/18	Deposit		88											
6	9/19	Farley Groc., Picnic	2		4							4			
7	9/20	Void Check	3												
8	9/20	Barklow, Jeweler	4		12								12		
9	9/21	Boese f. Mums	5		125									125	
10	9/22	Receipts #12-20				25	30		150	1					
11	9/23	Deposit		206											
12	9/24	Bad Check (Blue)		(5)			(5)								
13	9/25	Bank, Ser. Charge			2										2
14	9/30	Receipts #21-22					5								
15	9/30	National Office	6		25						85				
16	9/30	Deposit		5											
				394	229	85	45	12	150	2	85	4	12	125	3
17	9/30	Balance			165										
18				394	394										
19	10/1	Balance		165											

EXHIBIT G

* Cents Omitted

MEMBERSHIP ROSTER 1955/1956											
#	Name of Member	1st Semester or month				2nd Semester or month				Special Assessments	
		Init.	Dues	Pins	Misc.	Init.	Dues	Pins	Misc.		
1	Robert Black	25.00	2.00	0.00	0.00						
2	Irene Blue	25.00	2.00		1.00						
			5.00	*							
3	Henry Brown	15.00	5.00								
4	Nancy Green		5.00		5.00						

*Bad Check, see line 12, Ex. G

EXHIBIT H

systems, a special audit of social groups would be justified. Therefore we did not summon the treasurers of these groups for the first audit. However, a later investigation showed that they easily could be included in the general audit.

Out of 69 organizations only 41 answered our call. Only seven produced a satisfactory set of books. This alarming result put us on our toes. We recognized the urgent need of training, the necessity of cultivating the sense of responsibility, and the arousing of interest in a subject foreign to most students.

In October 1952 we called a meeting of all treasurers, making attendance a requirement. I got the assignment to convey to them, in less than an hour, in simple words and charts the "whys" and "hows" of bookkeeping. At the end of my lecture, realizing the inadequacy of this undertaking, I extended an invitation to the audience to visit me for individual instruction. Within the next two weeks about 40 students took advantage of this opportunity.

There is no doubt in my mind that the assistance rendered to the individual, rather than the mass instruction, was responsible for the progress shown in the second audit. This audit comprised 76 organizations. Thirty-three exhibited a good set of books; 43 could not pass the audit.

Although we sensed success, we did not fool ourselves. With almost half of the books in poor condition it was obvious that we were far away from our goal. We were aware that we not only had to do everything possible to hold the ground we gained but also to double our efforts.

STANDARDIZE BOOKKEEPING

One thing more we learned from this second audit: A standardized bookkeeping system would be a great help. We found a journal that we assumed would fit the needs of most organizations. In suggesting the use of this book we excluded fraternities and sororities for they have to follow accounting procedures set up by their national offices. We also left out 14 organizations whose transactions were too insignificant to warrant use of a journal. Forty-six out of 53 organizations that we advised to do so adopted our method the first year.

We know that the main obstacle standing in the way of our ultimate goal is the frequent change of officers

of student organizations. We thought we could overcome this difficulty by individual instruction and by standardizing the bookkeeping system. Although the third audit (1953-54) showed a slight improvement, considering our efforts, it was a failure. We found that we did not diminish or even curb the bad effects caused by lack of continuity of treasurers in office. Too often, particularly at this audit, I heard excuses such as: "My predecessor told me nothing" or "I got the books this way."

Again we urged the treasurers through the dean of students to visit the auditor for instruction before starting their assignment and to have the balance verified by him before turning the books over to their successors. The response was negligible. A few students showed up for advice, and only two or three for balance verification.

Therefore, it was with little enthusiasm and with moderate expectation that I began the audit for 1954-55. As anticipated, I found the records, apart from the first audit, in their worst condition; about 60 per cent of the books were in bad shape. I concluded that if we have to do the job, we cannot afford to stand on formalities. In other words, we have to go to the student if he does not come to us. With this in mind, I made the following recommendation in my audit report: "A 'Guide for Treasurers' should be prepared by the business office and distributed to the organizations at the beginning of each semester. I am prepared to write such a manual." The recommendation was accepted.

To be ready before the start of the fall semester, I went to work right away. I had in mind giving concise information on two or three sheets but, when I looked at the finished product, I had in front of me a booklet consisting of 14 double spaced typewritten pages. In spite of this length not a single word could be left out.

Throughout the manual I used plain language and simple diagrams that can be understood by everyone who can read, write, add, subtract and think. In the first three paragraphs I made the student aware of the honor bestowed on him by his fellow students in electing him treasurer. I asked him to be conscious of the importance of his assignment, his duties and responsibilities. I assured him that he needs no knowledge of accounting to perform his duties intelligently and satis-

factorily. I informed him that, once a year, he would have to submit his records for audit to the internal auditing office.

After these introductory remarks I started with the subject matter, which I divided into two sections: accounting procedures for small organizations (up to 10 members with total receipts not exceeding \$20 per semester), and accounting procedures for large organizations (all others).

Speaking first of the duties to be performed by both groups as collecting monies, handling receipts, and paying bills, I proposed for the smaller organizations the maintenance of a simple cashbook. With the help of a diagram I explained the keeping of such a record. Then I made the treasurers of larger organizations familiar with banking procedures (handling checks, deposits, reconciliation) and with the use of a classified cash record (also with diagram). I showed both groups a system of controlling outstanding receivables.

GET GOOD RESULTS

At the beginning of the semester (fall 1955) we distributed the manual to all treasurers, urging them to study it and to set up their bookkeeping system accordingly. The question was, how many would do so. Anxiously I waited for the time of audit, which took place in March 1956. The result was a pleasant surprise. Of 80 organizations audited, only 12 exhibited an inadequate set of books. In other words, poor bookkeeping dropped from 60 per cent (1954-55) to 15 per cent (1955-56).

We assumed that the manual was responsible for our success, and all our plans this year were made under this supposition. At the beginning of the school year we made certain that all treasurers were in possession of the manual. Faculty advisers were also put into the act, being reminded of their responsibilities and informed of what they can do in the way of supervision and advice to help us in the achievement of our goal.

We know that, although striving for perfection, we will have to be satisfied with progress toward that goal. More in one year, fewer the next, but student treasurers will be there, the "thick and hard" ones blocking the way to the heart and hand of the "king's daughter." We shall keep on fighting, this year more than ever, with victory in sight! #



Lecture room in Physical Sciences Building, University of Pennsylvania.

Housing the Physical Sciences

BRYDEN B. HYDE

Office of James R. Edmunds Jr., Architects, Baltimore

THE NEW PHYSICAL SCIENCES BUILDING at the University of Pennsylvania houses the department of mathematics and astronomy as well as physics. This happy juxtaposition of kindred specialties encourages an interplay of interests that was all but impossible in the widely dispersed and pitifully inadequate quarters previously occupied.

The opening of the new building represents a great forward step in the university's plans to develop a strong program of education and research in the pure and applied sciences.

The building is located in the same area of the campus as the schools of engineering and chemistry laboratories. This has brought about a concentration of qualified men and modern working facilities in pure and applied sciences that permits a unified approach to teaching, research and consultation.

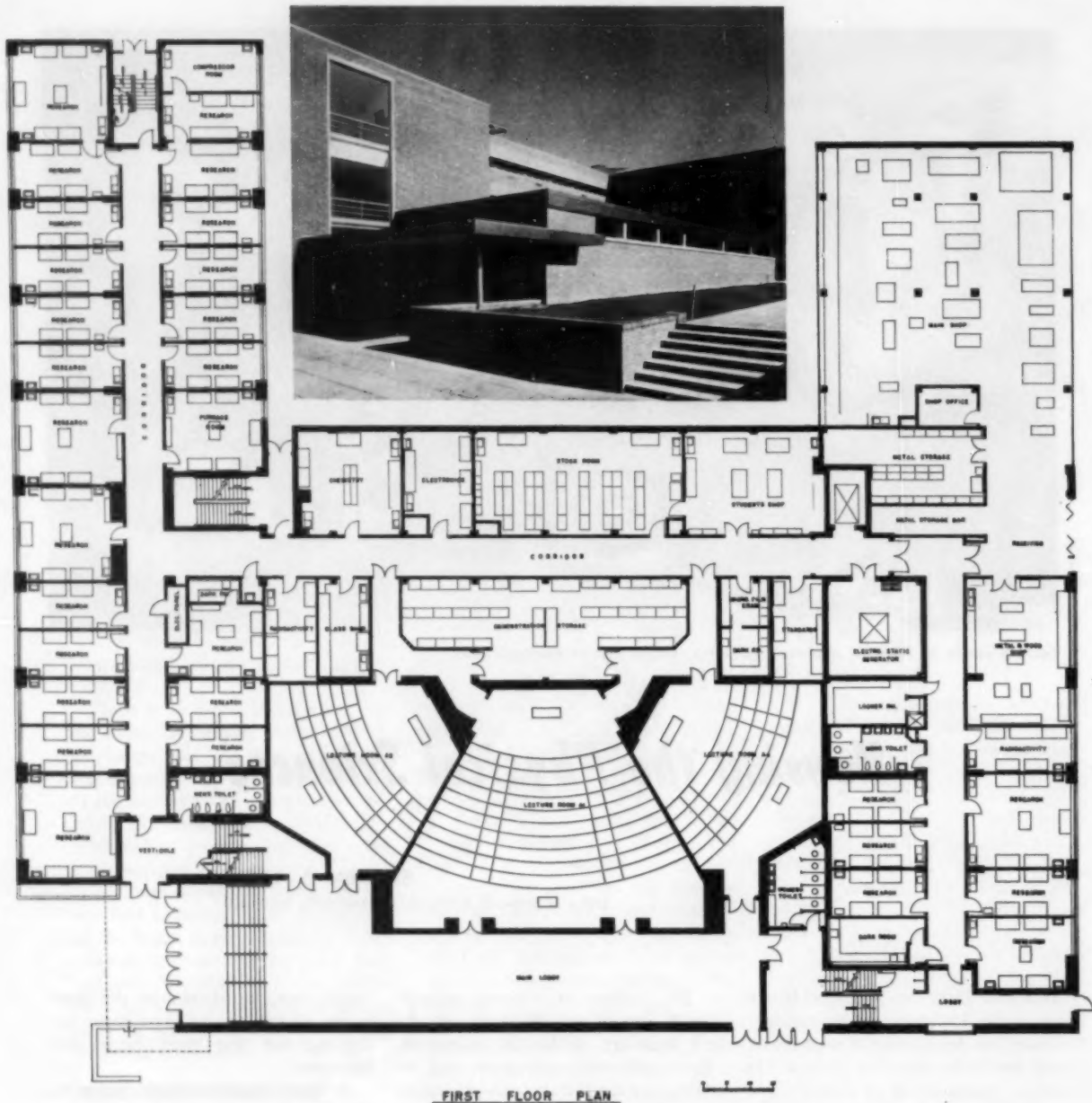
The training of a young scientist can be carried out effectively only by the blending of formal instruction, direct laboratory experience, and intermediate association with productive scientists actively engaged in current research. For these purposes the new building has been carefully planned, and has successfully harmonized the requirements of the novice student and the advanced scholar, bringing them together for mutual inspiration and providing each with the opportunity for new productivity and accomplishment.

An "H" shaped scheme of four floors and basement was considered the most adaptable for easy expansion and one that would most economically solve the problems of limited land space of an urban location and a limited budget. The departments of astronomy and mathematics share the

fourth floor, the laboratories and classrooms of the physics department occupying the first three floors and basement.

A large, bright entrance lobby on the first floor contains scientific exhibits in three large display cases. Long, leather-cushioned benches give the area a gallery-like atmosphere. Here are held weekly public teas, preceding the public colloquies in which prominent physicists lecture on their fields of specialization.

Opening off of the lobby are three air conditioned lecture rooms (two seating 100 each, and the third, 250) with sloping floors and theater seats with folding tablet arms. These lecture halls are equipped with motor driven chalkboards, projection screens, variable control of overhead light intensity, and demonstration tables with gas, air, water, electrical service, am-



FIRST FLOOR PLAN

CONSTRUCTION DETAILS

EXTERIOR: Reinforced concrete frame with 12 inch thick masonry walls. **INTERIOR:** Brick interior walls and painted slag black interior finish.

Partitions, painted black except in corridors, stairwells and toilet rooms where glazed structural tile wainscots are used, and in classrooms, where both sides of walls are plastered for sound control. Lecture rooms, glazed tile to wainscot height, plaster above.

CEILINGS: Corridors, metal pan acoustical tile under fiber glass blanket. Classrooms, offices and undergraduate laboratories, fissured acoustical tile; advanced research areas, sprayed-on acoustical treatment where concrete structure is left exposed.

FLOORING: Main lobby and lecture rooms, terrazzo. Remainder, asphalt tile.

DOORS: All undergraduate areas, metal door bucks with flush brick doors. Research areas, hollow metal.

COMMUNICATION SYSTEMS: Complete clock and program bell, fire alarm, telephone and voice paging systems.

ELECTRIC SERVICE: University has 2400 volt, three phase, 60 cycle distribution system. Double end unit substation in building steps service down to three phase, four wire, 120/208 volts. Substation consists of two transformers connected with a normally open tie breaker. In general, experimental and large building power requirements are taken from one transformer; lighting and small miscellaneous power from other, to avoid interference with lighting. In laboratories, AC and DC outlets of various voltages and experimental outlets. In addition, research laboratories have runs of plug-in duct to furnish flexible supply for large power requirements. Experimental outlets in laboratories connected to extensive tie line distribution panels of plug and jack type to provide for distribution of various direct and alternating power voltages throughout building and also coaxial transmission lines for distribution of radio frequencies.

COST: \$2,200,000, or \$1.30 per cubic foot.

plifying system, and closed-circuit television in the larger room. With the latter equipment it is possible for fine-scale phenomena to be demonstrated adequately, the precise eye of the television camera at the lecture table magnifying the image and presenting it on the several 21 inch screens placed around the periphery of the room.

Lobby and lecture rooms are so situated that students from other colleges on the campus can attend lectures in these rooms without conflicting with intrabuilding traffic.

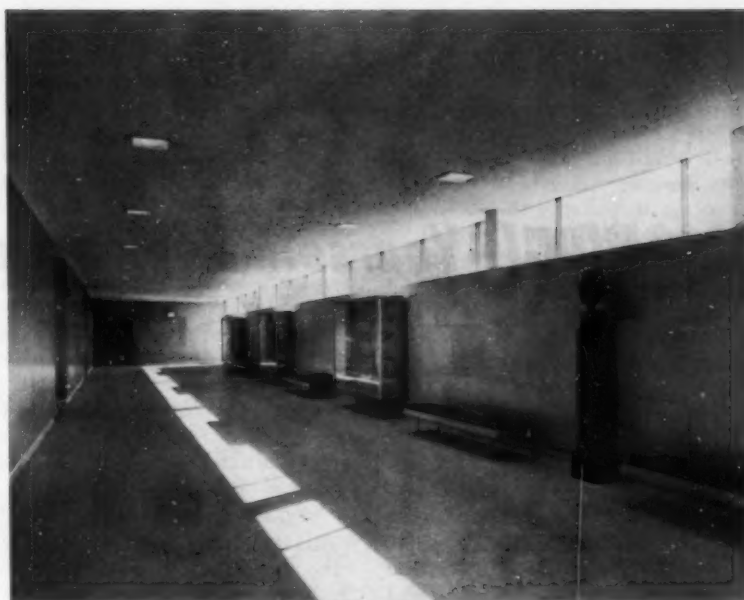
Built into the building, in an interior shaft extending from basement to roof, is a large precision, 3 million electron-volt Van de Graaf generator. This nuclear machine accelerates charged atomic nuclei to impinge on a target at the bottom of the shaft, where the resultant nuclear fragments and gamma rays are studied for the clues they yield to the structure of the atomic nucleus. An 8 ton electric crane operates on an overhead track at the top of the shaft for easy removal of the generator's heavy steel outer shell.

Other facilities for the nuclear research program are the beta-ray spectrographic laboratory, the radioactivity rooms with specially designed exhaust hoods, and the cavelike, heavily shielded vault for the safe storage of strongly radioactive material.

In the field of low temperature research there are a series of laboratories, with specialized facilities for experimentation in the range of a few degrees of the absolute zero, and a new Collins cryostat for the production of liquefied helium.

A considerable section of the laboratory space is devoted to solid-state physics and particularly to the study of semiconductors. Such studies underlie the modern development of transistors, thermistors, crystal rectifiers, and other solid-state electronic components.

On the second and third floors are the physics classrooms, offices and instructional laboratories. Besides general purpose laboratories, the latter include atomic physics, electricity and magnetism, electronics and optics laboratories. The worktables in the laboratories have outlets supplying gas, air and various voltages of alternating and direct current. Coaxial cables permitting the "piping" of various microwave frequencies throughout the building are built into the walls. The laboratories have large adjoining storage rooms in which the experimental equipment is kept.



Entrance lobby has gallery-like atmosphere. Here teas are held.

Instructional classrooms on the upper floors are oriented to the south with directional glass block panels above an operating vision strip sash and sunshade which doubles as a platform for window cleaners. A special feature of the window design is the low sill; a seated student can view distant trees and buildings providing vital relaxation for the eyes and lessening fatigue. Green chalkboards, pastel green walls, white acoustical tile ceilings, light asphalt tile floors, and birch table tops, all contribute to an almost ideal lighting environment. Eight foot louvered luminous, direct-indirect pendant luminaires with curved glass side reflectors for use individually or in continuous rows provide 40 footcandles at desk top height. Each room has a projection screen.

Faculty and graduate student offices as well as the library are lighted by fully enclosed indirect fluorescent fixtures providing 50 footcandles. Graduate and research laboratories are illuminated with stem suspended concentric ring incandescent fixtures that have silver bowl lamps to avoid interference with electronic experiments. Illumination level of 25 to 30 footcandles is maintained in these areas.

All basement and first floor research areas and shops are air-conditioned to assure proper humidity control for as near perfect experimental conditions as is possible. A combined physics, mathematics and astronomy library containing 19,000 volumes also is air-

conditioned and is centrally located on the third floor.

The new building has excellent shop facilities. Both the research and instructional programs require the construction of elaborate and specialized equipment, which can be done only by skilled machinists working in close collaboration with the scientist-designer. The ground floor of the building has a large main machine shop, with a full complement of major machine tools and with an overhead crane running around the shop and to the exterior loading platform through truck-size doors. Thus large items of machinery can be delivered to the building and handled through the machine shop with ease. Other shops are the wood shop, electronic wiring shop, glass shop, chemistry shop, and a well appointed student shop.

The astronomy department occupies a small but complete suite of rooms on the fourth floor with an observatory on the roof, which includes an 8 inch Clark refractor, a transit instrument, and a photographic telescope.

The experimental outlets in laboratories are connected to extensive tie line distribution panels of the plug and jack type, and these provide for the distribution of various direct and alternating power voltages throughout the building, and also coaxial transmission lines for the distribution of radio frequencies.

The architects were from the office of James R. Edmunds Jr. of Baltimore.

American University uses American ingenuity
to meet site and remodeling costs
and turns lost space into a profit producer

Do-It-Yourself Bookstore

W. O. NICHOLLS

Treasurer, American University, Washington, D.C.

THE SUBURBAN AMERICAN HOME owner isn't the only one who, when faced with a shortage of capital and a need for expansion, applies good old-fashioned ingenuity and, if necessary, elbow grease to get the job done. College and university business officers can save themselves headaches and money by examining the possibilities of "do it yourself" when it comes to needed adjustments in facilities.

Basically, this was the approach that led to American University's new supply store. Like so many other institutions caught up in the tremendous rush for higher education, we had neither unlimited capital nor an abundance of building sites. We did have an outmoded, inadequate bookstore operation that had to be replaced.

The answer to the problem of a site was the utilization of what had for-

merly been a sundry storage area in the basement of one of the university's main buildings. In turning this space into a profit producer, we not only eliminated a great deal of costly construction but also obtained a favorable central location without encroaching on high priority building sites.

The other major area of expense in which we were able to effect a major saving was in the actual fabrication itself. Working from designs and plans drawn up by Ken White Associates, the university's buildings and grounds personnel completed all fabrication, with the exception of the floor fixtures and a greeting card unit, which is of rather complicated construction.

One of the most striking features of the new supply store is a ceiling of suspended corrugated aluminum. This, together with a new asphalt tile floor with a terrazzo-like confetti pattern sprinkled on a beige base, gives the store a fashionable appearance, effectively masking most of the overhead piping and, at the same time, ensuring low maintenance outlays for many years.

Other visual highlights of our "do-it-yourself" bookstore are soft indirect lighting from a variety of contemporary lighting fixtures, indirect lighting from continuous cornices to spotlight the merchandise, an attractive pastel color scheme, and decorative gilt moldings on walls.

Careful attention to interior signs not only picks up the appearance of the operation but also makes a key contribution to customer convenience. Department signs are white with black lettering, except for the mail sign,

Suspended ceiling of corrugated aluminum, signs with backgrounds in pumpkin and yellow, and gilt molding are features that give the store a fashionable air. Floor fixtures, completely portable, plus the use of adjustable wall shelving, give maximum flexibility and permit unlimited rearrangements.



which retains the traditional red, white and blue. Each has a "spot" of high-key color; in addition, the distinction between regular textbooks and paper bound books is underlined by the use of pumpkin and light yellow, respectively, in the sign backgrounds.

Paying close attention to customer convenience has proved to be a useful selling technic. At the back of our store are post office boxes and a laundry station. This greatly increases store traffic and encourages the impulse buying potential provided by self-service fixtures. The bursar's office is in the store, too.

The only exception to self-service consists of two closed showcases adjacent to the check-out stations. Here are displayed small, high-priced items, particularly pens and college jewelry. By making these cases an integral part of the check-out stations, we avoided the hiring of extra sales personnel and reduced the danger of pilferage. The two check-out stations occupy one over-all island and this enables one clerk-cashier to service the entire store during normal periods.

For the display of pennants, banners and art materials, we have peg-

board wall sections. Pennants and banners are displayed exactly as they will be used, and this stimulates impulse sales. Besides proving highly decorative, this technic of display is thoroughly functional in that it saves space and eliminates extra shelving.

The remainder of the store's merchandise, with the exception of magazines, is accommodated by 7 foot high adjustable wood shelving. We used wood rather than metal because of the initial cost and also because metal would not have lent itself to our do-it-yourself system of fabrication. Wood is considerably easier to finish initially and makes minor redecoration simpler, and this cuts maintenance costs.

In addition to the flexibility gained through use of adjustable shelving, all floor fixtures are completely portable; they will permit any degree of rearrangement that management may desire in the future within the bounds of the actual physical structure itself. The widespread use of pegboard on walls also lends itself to maximum flexibility as do the small shelves mounted on columns, which, in addition, make for economical utilization of what is usually waste space.

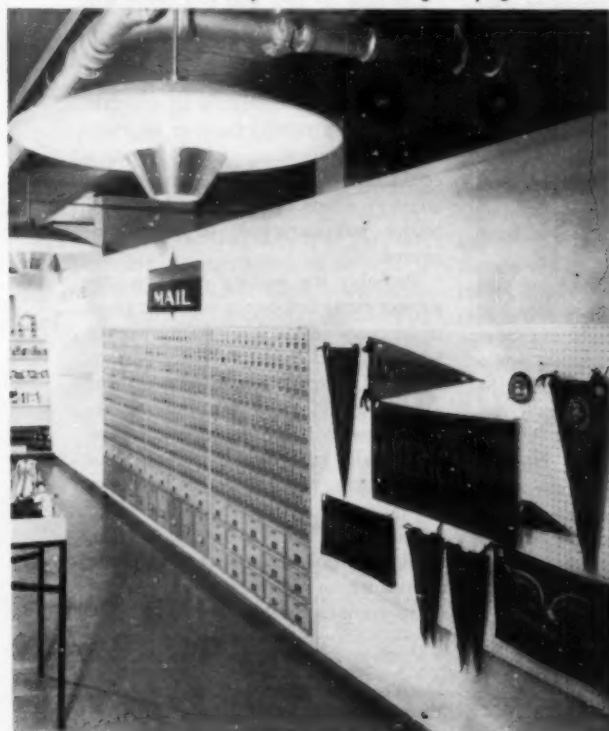
The manager occupies a raised office so that he can supervise the entire floor while attending to necessary paper work at his desk.

Perhaps the most important single feature in improving efficiency and at the same time lowering personnel costs is the use of perimeter stockrooms. In this manner all stock items are located directly behind the areas in which they are displayed. This allows us to make extensive use of part-time help without having to spend a lot of time orienting them to a stockroom setup that is not clearly related to the presentation of merchandise in the display and selling areas. Under our arrangement part-time employees can be depended upon to keep shelves properly stocked with a minimum of supervision and handling. There are no shelves empty during rush periods.

Coupling perimeter stock arrangement with the provision of entry points for each department also facilitates direct movement of stock from storage areas to display shelves. In this way we have eliminated the excessive confusion during peak periods of clerks crossing customer traffic lines to restock shelves. #

Private mail boxes and laundry facilities are important conveniences. They bring in additional traffic and serve to move traffic by the displays since they are located in the rear. Art materials and pennants are hung on pegboard wall.

Bursar's office is accessible from both inside and outside of the store and is another added convenience that increases customer traffic and stimulates impulse sales. Location of manager's office facilitates complete supervision and control.



Before Expulsion—

does a student have the right of due process of law?

T. E. BLACKWELL

Educational Management Consultant, Washington University, St. Louis

IN OCTOBER OF 1949, A YOUNG woman enrolled in the medical school of the University of Illinois. She was suspended in May 1953. According to her statement, she was not informed as to the reason for her suspension until her attorney demanded a hearing on her behalf.

A year after her dismissal, she and her attorney appeared before the university committee on policy and discipline. There, she was informed by the attorney for the university that she had been suspended for submitting, as her own, two examination papers written by another individual. No witnesses were produced at the meeting to support these charges.

Despite her vigorous denial of this accusation, the committee recommended her expulsion. After expulsion she filed a petition with the circuit court of Cook County for a writ of mandamus to compel the trustees of the university to readmit her.

She claimed that she had a constitutional right to due process of law, *i.e.* the right to a formal hearing at which she would have an opportunity to confront the accusing witnesses and to cross-examine them under oath. The circuit court declined to grant the writ and she appealed to the state supreme court. Three years after her suspension the higher court issued its decision.¹

Judge Niemeyer, in confirming the refusal of the circuit court to grant

the writ of mandamus, quoted with approval the following opinion of another Illinois court:²

"In order to carry out the powers and duties of school directors . . . , no form of trial or hearing is prescribed. . . . The board of education is authorized, in a reasonable and parliamentary way, to investigate charges of disobedience and misconduct and to suspend or expel one whom they may find guilty of violation of their reasonable and valid rules."

A young woman registered as a student in Syracuse University in 1923. Three years later she was peremptorily dismissed. No statement of the grounds of dismissal was made, and no opportunity to answer charges was given. In this action the university relied upon the following statement, published in its catalog and specifically referred to in its registration form, signed by every student:

"The university, in order to safeguard its scholarship and its moral atmosphere, reserves the right to request the withdrawal of any student whose presence is deemed detrimental. Specific charges may or may not accompany a request for withdrawal."

The student brought an action in the New York supreme court for a judgment directing the university to reinstate her. In granting the order of reinstatement,³ Judge Smith had this to say:

"The right to one's life, to develop one's character, to have one's reputation free from smirching by the acts

of others is inherent and one of the most valuable of rights; no institution, by its own act, can endow itself with the power to impair, by indirection, by innuendo, or by implication, the reputation of an individual. . . . The regulation, as operative in the instant case, creates an intolerable and unconscionable situation, and the action of the university under it is void, because it is arbitrary, unreasonable and, in a high degree, contrary to a true conception of sound public policy."

Despite Judge Smith's ringing declaration of human rights, his decision in favor of the student was reversed⁴ on appeal. Judge Sears justifies his reversal on the following grounds:

"The university need not accept as a student one desiring to become such. It may, therefore, limit the effect of such acceptance by express agreement, and, thus, retain the position of contractual freedom in which it stood before the student's course was entered upon. I can discover no reason why a student may not agree to grant to the institution an optional right to terminate the relations between them."

An earlier decision⁵ of the New York supreme court had held that a college of medicine cannot arbitrarily refuse to allow a student to take its final examinations and receive a degree. The following is an excerpt from the opinion of the court:

"It may be true that this court will not review the discretion of the corporation in refusing . . . to permit a student to be examined and receive a degree; but where there is an arbitrary and absolute refusal there is no exercise of discretion. . . . Such a position could never receive the sanction of a court in which even the semblance of justice was attempted to be administered."

Probably the leading case⁶ on this subject came before the supreme court of Montana in 1927. A young woman was dismissed from the University of Montana without having been granted a hearing and the opportunity to defend herself. The court, after a review of virtually all of the important cases in this area, rejected her petition for reinstatement on the following grounds: ". . . the president of the university has no authority to compel the attendance of witnesses at a hearing or to compel them to testify if they

¹People ex rel Bluette v. Board of Trustees of University of Illinois, 134 N.E. 2d 635 (1956).

²Smith v. Board of Education, 182 Ill. App. 542.

³Anthony v. Syracuse University, 223 N.Y.S. 796 (1927).

⁴Anthony v. Syracuse University, 231 N.Y.S. 439 (1928).

⁵People ex rel Cecil v. Bellevue Hospital Medical College, 14 N.Y.S. 490 (1891).

⁶State v. Clapp, 263 P. 433 (1927).

were present. To hold that the power of suspension could only be exercised after a hearing had been held . . . would be to hold that the power was practically ineffective. . . ."

The student, through her counsel, requested the Supreme Court of the United States to review the question of her constitutional right to due process of law. The request for review was denied.⁷ The courts of Florida⁸ and Kentucky⁹ have said, in effect, that an educational institution, supported in whole or in part by appropriations from the public treasury, has somewhat less arbitrary disciplinary power over its students and that its rules will be reviewed somewhat more critically by the courts than those of a privately controlled institution.

Committees on student discipline might well ponder the following comments of Mr. Justice Galen, in his dissenting opinion in the University of Montana case:⁷

"A case of this character should never be before the courts, and would not therein be given serious consideration were administrative officers disposed to perform their simple duty in the premises."

An excerpt from an Ohio court opinion¹⁰ has been frequently cited as providing an outline of the proper procedure to be followed by disciplinary committees: ". . . it is not necessary that the professors should go through the formality of a trial. They should give the student whose conduct is being investigated every fair opportunity of showing his innocence. They should be careful in receiving evidence against him; they should weigh it; determine whether it comes from a source freighted with prejudice; determine the likelihood, by all surrounding circumstances, as to who is right, and then act upon it as jurors with calmness, consideration and fair minds. When they have done this and reached a conclusion, they have done all that the law requires them to do."¹¹

⁷State of Montana ex rel Ingersol v. Clapp, 277 U.S. 591, 278 U.S. 661 (1927).

⁸John B. Stetson University v. Hunt, 102 So. 637 (1925).

⁹Gott v. Berea College, 161 S.W. 204 (1913).

¹⁰Koblitz v. Western Reserve University, 21 Ohio Cir. Ct. R. 144 (1901).

¹¹See also: Blackwell, T. E.: The College Disciplinary Committee and the Courts, Coll. and Univ. Bus. 8:44 (May) 1950.

Blackwell, T. E.: Does a Student Have a Legal Right to Earned Academic Credits, Coll. and Univ. Bus. 20:34 (April) 1956.

Eleven suggestions for

Adding Interest to Meals

PAUL FAIRBROOK

Manager, Auxiliary Enterprises, Northern Illinois University, DeKalb

IN SPITE OF THE OFTEN AVOWED resolution to make college residence halls a "home away from home," even under the most ideal conditions life in a residence hall never closely approximates a student's life at home. Often it is a better life in the dormitory, particularly when it comes to the food he is eating. Why then do students complain about the food and, worse than that, why are such complaints accepted as inevitable by college administrators?

At Northern Illinois University we do not take such complaints for granted. Nor do we delude ourselves into thinking that the roasts, chops and cutlets that a student is eating in our halls four or five times weekly will necessarily always appeal to him more than the hamburgers or stew that may have constituted the usual family fare at home. We recognize that raiding Mom's ice box beats snacking from a vending machine, and that our mass-produced bacon and eggs are no match for the personalized breakfasts to which he is accustomed. At the same time, we feel justified in appealing to students' general common sense and basic sense of fairness to evaluate the food at the university.

It is important that students realize how hard we are trying, all the time, to make them happy. The difference between a tough piece of meat from Mother and one from the residence hall's cafeteria line exists only in the student's mind; frequently, it consists only of a feeling that Mother tried but failed, whereas the college cooks "simply do not care." It is this feeling that we are trying to change, and we

think that slowly but surely we are doing it.

The key to good student-food service relations is good communications between the two. Without active liaison between students and food supervisors (via food committees and the like), it is almost impossible to create a lasting atmosphere of mutual respect and good will. Students as well as supervisors must have a chance to explain their problems and suggestions, and to do so in accordance with established procedure that permits calm and objective analysis of each problem.

Once good communications have been established, incentive to take advantage of them follows. If you can get close to your students, you can

Preparing dessert for typical dinner.



RECIPE FOR MILK SHAKE

Yield: 150 Servings

6 gals. chocolate or vanilla ice cream @ \$1.14.....	\$ 6.84
5 gals. milk (bulk) @ \$0.45.....	2.25
1/2 can double strength chocolate sirup.....	0.50
Total Cost.....	\$ 9.59
Cost per serving.....	0.064

1. Place milk in freezer until it slushes. (Optional)
2. Place ice cream in refrigerator for about four hours.
3. Place ice cream in 60 or 80 qt. bowl with splash cover and mix at low speed, after adding chocolate sirup and some of the milk, using flat beater.
4. Add rest of milk slowly and mix at medium speed, using a wire whip.
5. Pour into 8 ounce cups and serve.

Caution: Do not mix ice cream until it is fairly soft and do not use wire whip until consistency is smooth.

think of many exciting little ways in which to please them.

Looking back at our efforts during the recent past, many ideas come to mind that were suggested by supervisors and subsequently tried with good results. Most of these ideas are not novel to others, but for us at Northern they were new; when they succeeded, they delighted not only the students but also gave those in food services a feeling of accomplishment. Some of the things we did follow:

Choice of ice cream at every lunch and dinner. A careful analysis of our dessert costs showed that the average cost was more than a penny higher than the cost of an ice cream slice. As a result, we now give students a choice between the regular dessert and ice cream at every luncheon or dinner meal. This has had the triple effect of making students happy, relieving the production load on the central bakeshop, and saving the university several thousands of dollars per year in food costs.

Serving milk shakes for lunch. We found that whenever students tired of residence hall food, they would go downtown and oftener than not order a hamburger, French fries, and a milk shake. Since we already were serving the first two items, it was a relatively simple matter to introduce the milk shake. To get the ingredients to the right consistency for the big mixers, we kept the ice cream in the refrigerator for a few hours, and the milk in the freezer for a short time. Then we bought some 8 ounce milk shake cups and served milk shakes for dessert. Our students loved it!

Peanut butter and jelly on condiment tables. Since most students like peanut butter and jelly sandwiches, we found it relatively inexpensive to

have these ingredients on the table at every luncheon when the regular entree is either not universally popular or not substantial enough for all appetites.

Assorted cheeses with meatless entrees for Lent. When we served vegetable chop suey on rice for lunch during the lenten season, we placed a large plate of assorted cheeses cut into 1 to 2 oz. squares on the condiment tables. Beside it was a cottage cheese bowl and a bowl of pickled herring. The total cost of these entree items was less than our regular meat entrees, in spite of the fact that the students ate all they wanted.

Chicken in the basket. For the sake of variety, we sometimes serve "chicken in the basket" in the women's residence halls. We bought inexpensive straw baskets for this purpose, and sprayed them with a plasticizing solution. With the chicken we usually serve a biscuit, potato chips, and sometimes a small soufflé cup of honey. These baskets have been used also for hamburgers and similar items. We have not tried this in the men's dining room because men wouldn't be willing to do without their mashed potatoes in exchange for the straw basket and the little cup of honey, whereas the girls like the occasional change.

"Snowballs" and "ice cream pie." In our constant search for new and different menu items, we recently tried two new ones that proved quite successful. Snowballs consist of balls of ice cream rolled in coconut and placed on top of chocolate fudge on a dessert plate. Sometimes we toast the coconut. The other dessert, ice cream pie, consists of pie shells filled with one or two kinds of ice cream topped with meringue, which is placed under the broiler a few minutes before it is

served. Variations to this, such as using frozen strawberries under the meringue, also work well.

Electric griddle on the serving line. In order to give made-to-order eggs for breakfast, we placed a large (24 by 36 inch) griddle on a portable cart and installed a 220 volt outlet near the serving counter in the men's dining room. Each morning we fry pancakes and eggs to order; when the rush gets heavy, we supplement it with the range griddle. In our newly planned residence hall kitchen, where 1500 students will be served from four serving lines, we shall have four such griddles and use them on the lines for breakfast and in the range section for lunch and dinner production.

Choice of sweet rolls or eggs for breakfast. Recently we expanded the choices available to the men at breakfast time. They now have a choice of several kinds of fruit juice and/or two or three kinds of fruit every morning, along with the choice of sweet rolls instead of the main breakfast item. (They have always had a choice of cereals.) This has been so popular that we shall probably extend the system to our women's dormitories next year.

Hors d'oeuvres or punch at special occasions. We have found that serving hors d'oeuvres or punch in a lounge or lobby where students are waiting to enter the dining room is a special treat on special occasions, such as Christmas or Mother's Day. It prepares everyone for a special meal and puts them in a holiday mood.

Hi-fi sets and loudspeakers in dining rooms. All dining rooms are equipped with loudspeakers and recorded music is played during the meal hours. This equipment was bought by the various residence hall organizations, which also set up their own rules as to the type of music played. We reserve the right to veto some selections, so that the digestive processes of our students are not unnecessarily disturbed by rock 'n' roll rhythms, at least not during the meal hours.

Prints of well known artists in the dining room. One of our residence hall dining rooms was rather dark and gloomy. Even light paint and a 6 foot planter did not help materially. We then hung 14 small (16 by 20 inch) and two large (30 by 40 inch) prints by well known American painters all around the room. The pictures are all reflections of the American

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Bottom: KINDERGARTEN—Hope Valley Elementary School, Hope Valley, Pa. . . . Close-ceiling Mounted Holophane **PARADOME*** Luminares, 300 W. Incandescent . . . Illumination—33 footcandles.



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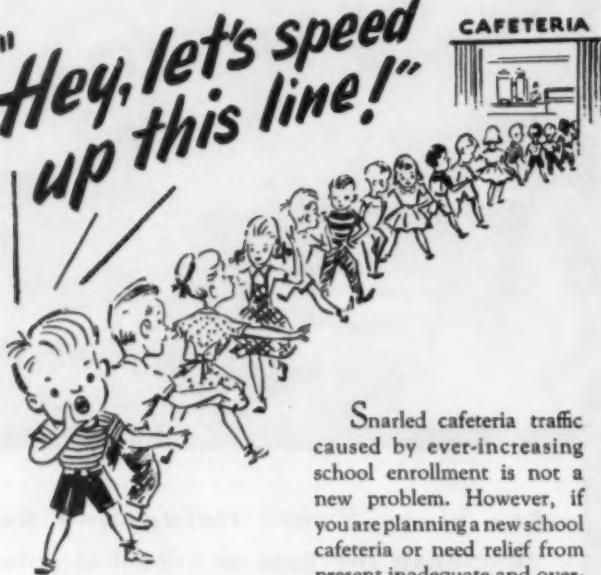
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scene with desert, mountain, landscapes and seascapes all being represented. The improvement to the room is much greater than one would have expected for the relatively small investment made (about \$175).

While not in the same category as the 11 food ideas listed, another experiment proved successful during the year. It was a food service job application form for student employees, containing a statement of responsibilities. This the students were expected to sign.

Like all other college food service operations, we had been plagued by a considerable amount of absenteeism and by many students quitting their jobs around the end of each semester. Last year, in our student union building, we lost 33 out of 45 student employes before the first of June. As a result, we weighed the various possibilities. We dismissed the bonus system as being too cumbersome from an accounting standpoint. The suggestion was made that we appeal to the students' sense of responsibility. We prepared a job application card that gave us not only their class schedule, address and other vital details, but which also contained, on the back, a "statement of responsibilities." The content of this statement was not only explained individually to each student before he was required to sign the card, but it also was posted over each time clock in the various units.

Every student knows that failure to show up for work without having been previously excused or without having found a qualified substitute becomes his first and last chance. At the next repetition, the student is not only out of a job but will not be rehired in any of our six food units for the rest of his college career. The same applies to those who quit their job without adequate cause. The adequacy of their reasons is determined by the respective food supervisors, who have been told that a student's desire to prepare for final examinations is not normally sufficient reason to quit his campus job.

The new application card, which appeals to the student's sense of responsibility, coupled with our rigidly enforced rules of job performance have cut the number of students quitting without cause to a trickle. Only four or five students have quit their student union job this year without cause, and several of these were seniors who had nothing to lose. #

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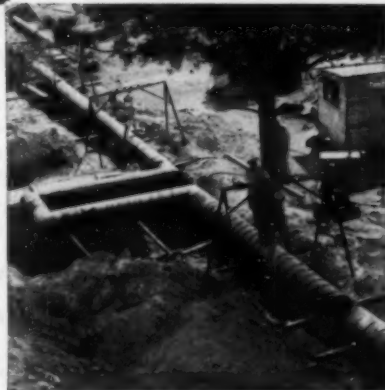


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NEWS

McGill University Returns Large Federal Grant . . . Find Gifted Students

Profit by Early Admission . . . Williams College Moves to Eliminate

Fraternity Discrimination . . . Tape-Record Textbooks for Near-Blind

Would Cut Engineering Credits for Service Men

ITHACA, N.Y.—One-third of all engineering colleges in the nation have indicated that little or no credit toward engineering degrees should result from military training given to college students by the army, navy and the air force. This information was given in a report submitted before the American Society for Engineering Education by H. Barlow, director of the Institute of Technology of the State College of Washington, Pullman.

Of 142 engineering schools, 126 with accredited courses participated in the survey. Forty of the colleges or universities recommended that military training be reduced in credit toward a degree.

Requests Fraternities to Eliminate Discrimination

WILLIAMSTOWN, MASS.—Williams College, through action taken by the board of trustees, recently moved to eliminate discrimination in elections to fraternity membership.

Dr. James P. Baxter III, president of the college, directed letters to the attention of the undergraduate heads of the 15 fraternities on the campus requesting written assurance before Jan. 15, 1958, of each chapter's freedom to select its members on the basis of merit as individuals.

The Williams board of trustees had made two statements of policy on discrimination, one in 1946 and the other, an expansion of the first, in 1955. The 1955 statement was:

"In election to fraternities and to campus offices, the board holds that each undergraduate should be accorded whatever recognition he merits as an individual, according to his ability, achievement, personality and character, and further emphasizes its position that no fraternity may operate on the

Williams campus whose Williams chapter is not free to elect to membership any individual on the basis of his merits as a person."

N.Y.U. President Elected Head of Town Hall

NEW YORK.—Action was taken recently to bring the affiliation between New York University and Town Hall, Inc., a bit closer. Dr. Carroll V. Newsum, president of N.Y.U., was elected to succeed Dr. Alvin C. Eurich as chairman of the Town Hall board. Dr. Eurich will continue as a board member.

According to Dr. Eurich, the ultimate objective will be to make Town Hall a unit of the university once the necessary legal steps have been completed. Town Hall, a top radio feature before the advent of television, is a nonprofit membership corporation dedicated to educational purposes. Last September the university and Town Hall worked out arrangements to plan and conduct new programs jointly.

According to newspaper accounts, although some changes in program are expected ultimately, the regular concerts at the hall at 123 West 43d Street will continue during the summer and lectures will resume on October 1.

Vassar College Will Auction Its Cattle

POUGHKEEPSIE, N.Y.—Because of rising operating costs, Vassar College will dispose of its Guernsey dairy herd by auction, Louis L. Brega, general manager of the college, has announced.

Mr. Brega values the total herd at from \$40,000 to \$50,000. It was established 50 or 60 years ago to supply students with fresh milk. Vegetable farming will be continued on the 550 acre farm owned by Vassar.

Gifted Students Profit by Early Admission

NEW YORK.—Talented and bright youngsters can profit from attendance in college at an earlier than normal age, a recent report completed and released by the Fund for the Advancement of Education, a subsidiary of the Ford Foundation, reveals.

Under the early admissions program conducted under the auspices of the Fund for the Advancement of Education, a total of 1350 students of high academic standing were sent to 12 colleges and universities before they completed high school. The program began in 1951. Most of the students came through with outstanding records.

The report reveals that most of the early admissions students outperformed their classmates academically. They were also ahead of a special group of comparison students who had entered the same colleges at the normal age and were considered on a par intellectually. The early admissions scholars were about two years younger. There were 1024 boys and 326 girls in the group observed.

Although the experiment has been completed, 11 of the 12 colleges incorporated in the original plan have decided to retain the early admissions program. The University of Wisconsin has not yet made a decision.

The group participating in the study included the University of Chicago, Columbia University, Fisk University, Goucher College, Lafayette College, University of Louisville, Morehouse College, Oberlin College, Shimer College, University of Utah, University of Wisconsin, and Yale University.

40,666 Foreign Students Study in U.S. Colleges

NEW YORK.—The Institute of International Education reports that 40,666 foreign students were enrolled in



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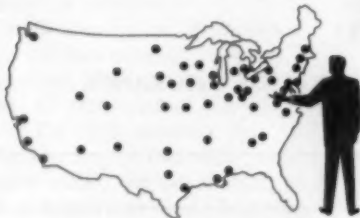
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colleges and universities in the United States during the past academic year. A third of the number were from the Far East.

According to the survey, Canada had the largest representation with 5379 students. China with 3055 students was second, and Korea with 2307 was third.

According to the survey results, the Far and Middle East students majored in engineering, with the humanities and social sciences as second and third choices. The Europeans and Canadians chose engineering after the humanities. Almost half of the foreign students were studying in the United States through private financial support rather than government subsidy from their own governments or from the United States.

The Institute of International Education also reported that 9887 students represented the United States at 387 educational institutions in 54 foreign countries during the academic year that began in 1955.

University Returns Large Government Grant

MONTREAL, CANADA. — McGill University officials in this city have made a decision to return to the Canadian government a federal grant of \$1,200,000.

The action was taken following months of opposition by Quebec's Premier Maurice Duplessis to what he has described as federal interference in education, a field that he feels is strictly within the limits of provincial jurisdiction.

Premier Duplessis has contended that the action by the federal government is an infringement of the British North American Act, which defines the constitutional prerogatives of the provinces and the Ottawa government.

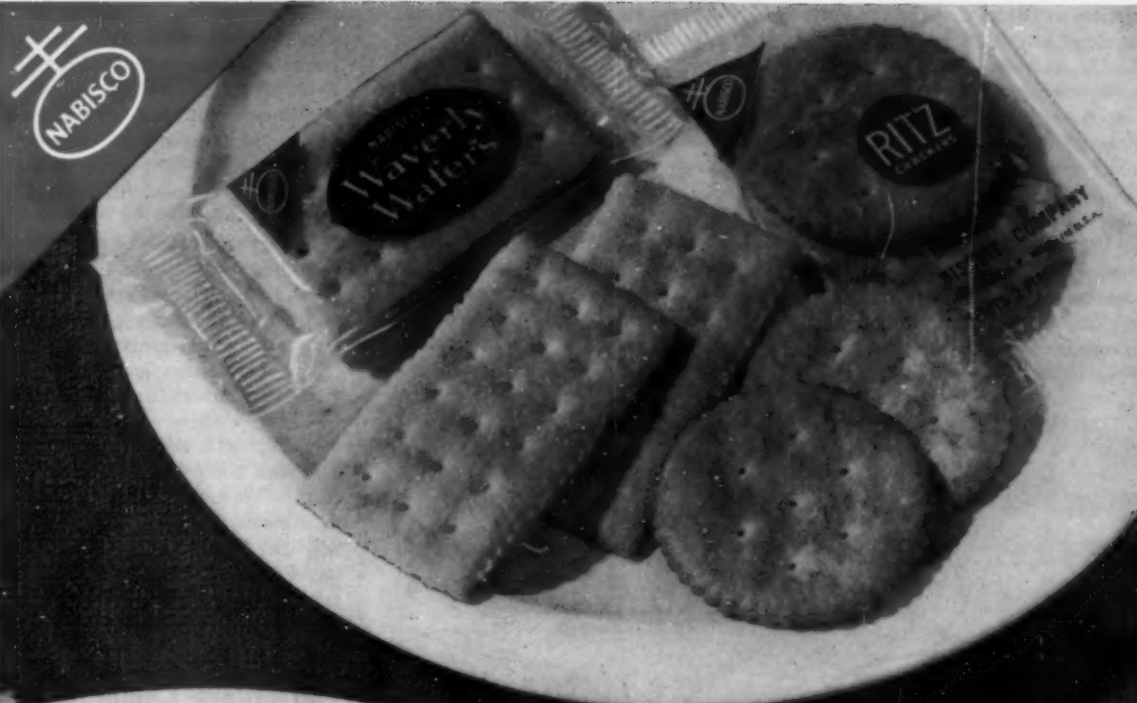
McGill was the last of six Quebec universities to return to the Canadian government grants that were part of a \$16 million allotment to universities announced some months ago.

More Ford Millions Aid Private Colleges

NEW YORK.—The Ford Foundation announced recently that 630 privately supported colleges would receive \$130,172,500 as the second and final payment under the Foundation's program to raise faculty salaries.

The total appropriation of \$260 million was voted by the Ford Foundation.

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dition in 1955. First payments were made in July 1956.

The total includes \$210 million in endowment grants, the income from which may be used for 10 years to increase faculty salaries. Thereafter, each institution may use the principal for further salary support or for any other academic purpose.

The remaining \$50 million went to 126 institutions that previously had demonstrated leadership in their own regions in improving the status and compensation of their faculties. The Foundation permits the money to be

used either to raise faculty salaries or for other pressing academic needs.

To Train 200 Indians in Steel Industry

NEW YORK.—The Ford Foundation recently announced a grant of \$1.5 million to the government of India for the training of 200 Indian engineers in the management and production methods of the United States steel industry.

The training, to begin in September and to take one year, will be conducted by the nation's eight largest steel com-

panies. Academic instruction will be provided by cooperating technological institutes in the vicinity of the plants to which the trainees are assigned.

Carnegie Institute of Technology will be administrator of the program in this country and serve as liaison between educational institutions and steel companies.

Cooperating educational institutions, in addition to Carnegie Tech, are Case Institute of Technology, Illinois Institute of Technology, Lehigh University, and the University of Cincinnati.

The Foundation grant will underwrite the trainees' living expenses in the United States and academic fees connected with their institute studies. The steel companies will assume the costs of instruction and training in their plants. The government of India will pay the trainees' international travel expenses and the costs of preliminary training in India.

Ohio State Opens Two Branch Campuses

COLUMBUS, OHIO.—Branch campuses of Ohio State University will be established in Marion and Newark, beginning with the autumn quarter.

Negotiations also are under way in Mansfield for operating a branch, possibly next year. Other branches may be established in strategically located populous areas of Ohio. Only such campuses as may be administered effectively from the parent campus may be established, the board has specified.

Teaching staff will be recruited from the university faculty on an overload basis, from faculties of near-by colleges, from well qualified persons in the community, well qualified high school teachers, and retired college professors.

Columbia Petitions to Oust Tenants

NEW YORK.—Columbia University has filed a petition in the New York court to oust tenants from a seven-story, 30 apartment building on Riverside Drive. The University bought the building last year for \$245,000 and had applied to the city rent office for certificates of eviction of 30 tenants.

University trustees stated that the only reason for buying the building was for its use by married students. More than 400 married students were unable to enroll for courses at Columbia last year because of lack of housing

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accommodations. The university intends to renovate the building to accommodate 80 or 90 couples.

Only six of the present tenants of the building have relocated, the rest having resisted eviction.

Joseph Nye, director of residence halls, asserts that the university would like to obtain the building immediately in order to allow sufficient time for renovation before the fall semester.

Tape-Records College Textbooks for Near-Blind

NEW YORK.—A free lending library of tape-recorded college textbooks for the blind and for visually impaired students is being assembled at City College and New York University.

Faculty members and students of City College have recorded a basic economics text and are now preparing to "tape" history, philosophy, mathematics and English textbooks. A group at N.Y.U. has tape-recorded a psychology text.

Harvey Honig, a former City College student now studying occupational therapy at N.Y.U., originated the program. Mr. Honig began studying engineering at City College in 1953, but difficulties with his sight forced him to withdraw the following year for eye surgery. He returned to the college with an increased awareness of the needs of the visually impaired and the determination to do something about it.

With the help of Dr. Margaret Condon, executive secretary of the college's health guidance board, and a faculty member of City College and N.Y.U., Mr. Honig formed an organization now known as the Association for the Visually Impaired.

Except for the program of the association, it is reported that no reading aid is available to visually impaired students who do not meet state and federal definitions for legal blindness.

Elects New Chairman

PURCHASE, N.Y.—Dr. Eugene G. Bewkes, president of St. Lawrence University, has been elected chairman of the Empire State Foundation of Independent Liberal Arts Colleges. He succeeds Dr. M. Ellis Drake, president of Alfred University. The foundation is a cooperative organization of 23 nontax supported colleges in New York State working together to encourage greater financial contribution to higher education.

Colleges Are Backward in Foreign Language Teaching

NEW YORK.—A survey of 971 American colleges and universities reveals that the East remains a bastion of modern foreign language teaching, particularly in the numbers of different languages offered students.

Of the top 11 collegiate language centers in the nation, six were found to be in the East, three in the Midwest, and two in the Far West.

Far in front is Columbia University, where 41 languages were being taught

during the 1954-55 period of the survey. Second and third ranking institutions were Harvard, teaching 26 different modern languages, and Yale, teaching 25.

The survey was conducted by the Foreign Language Program of the Modern Language Association of America which, with Rockefeller Foundation support, set out four years ago to make the most intensive language fact-finding survey in the history of the United States.

Perhaps most startling of survey results was the fact that 38 institutions

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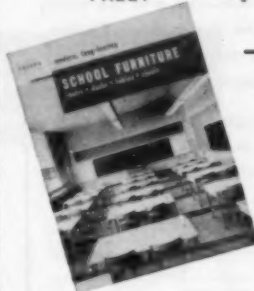
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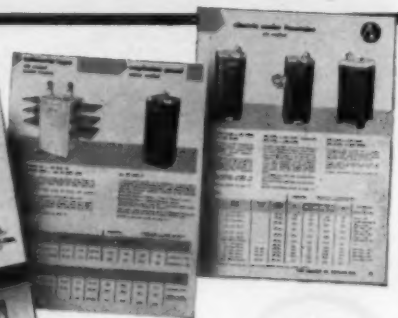
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offer no modern foreign language instruction at all, while 493—almost exactly half of the 971 reporting—offer foreign language instruction only in French, Spanish and German.

The survey confirmed the fact that French remains the most favored foreign language in America. A total of 905 institutions of the 971 reported instruction in French.

However, Spanish had climbed to a close second by the 1954-55 academic year, being taught in 867 institutions, a scant 38 schools behind French. German stood third with 825 schools, and Italian fourth with 212.

The influence of the Soviet Union's position in the modern world is clearly reflected in the fact that Russian is now taught in 183 schools, making it the fifth-ranking modern language taught in the U.S.

After Russian the number of institutions offering each individual language fell off sharply, Portuguese running a weak sixth with 69 centers, and Swedish seventh with 31.

In a survey prologue, Prof. William R. Parker, former executive secretary of the Modern Language Association and now of Indiana University, notes that 72 per cent of the world's total population—some 1.9 billion persons—speak as natives a language not usually taught in American colleges and universities.

Chinese, spoken by some 500 million persons, for example, is taught in only 29 schools. Japanese, spoken by 100 million, is offered by only 22 institutions, Korean (with 32 million) by only 20.

Hindu-Urdu, spoken by 150 million people in India, is listed by only six institutions, and Malay, spoken by another 70 million, by only five institutions. In fact, the survey, listing 78 world languages spoken by a million or more speakers natively, shows that 58 languages are taught by five or fewer schools.

The top 11 collegiate language centers, according to the survey, are Columbia, 41; Harvard, 26; Yale, 25; Pennsylvania and California, 24 each; Cornell, 23; Georgetown and Indiana, 22 each; Washington, 18; and Michigan and Minnesota, 14 each.

Faculty Shortage in Engineering Colleges

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crease in their faculties by next fall. By 1966, they will need a 65 per cent increase.

To make their salaries comparable with those of engineers in nonteaching jobs, beginning faculty members should have an immediate 45 per cent increase in pay, according to Dr. William H. Miernyk, director of the bureau of business and economic research at Northeastern University.

Based on information received from 78 schools throughout the country, Dr. Miernyk reported that 8 per cent of the budgeted faculty posts for 1956-57

were unfilled, presumably because qualified candidates could not be found to fill them. Private institutions were short only 6.8 per cent, publicly supported institutions 9.3 per cent.

NAMES IN THE NEWS

Maristell Dixon, personnel officer with several Chicago business firms, has been appointed nonacademic personnel and student employment officer at Illinois Institute of Technology. Miss Dixon will be responsible for hiring nonfaculty employees and part-time student workers. She received her under-

graduate degree from I.I.T. in 1948, and her master's degree in personnel work from Loyola University.

Rev. Carl A. Hangartner, S.J., formerly assistant dean of St. Louis University's college of arts and sciences, is now executive vice president of the university, a new post created to meet growing administrative needs.

Louis H. Fitch, business manager at Wittenberg College, Springfield, Ohio, since 1949, recently received one of the highest honors



Louis H. Fitch

that can come to a member of the Wittenberg staff when he was designated to receive the "Class of 1914 Award" for meritorious service. The presentation of the award was made during the commencement week end.

Samuel K. Hostetter, who has served Pennsylvania State University for nearly 50 years as purchasing agent, controller and treasurer, will retire on October 1 with the title of vice president for finance emeritus. The new title becomes effective with his retirement.

C. Ruggles Smith has been named general counsel and special assistant to the president of Brandeis University, Waltham, Mass. The son of Dr. John Hall Smith, founder of Middlesex University, he served that institution in many capacities, including the presidency of its board of trustees, until 1947, when he implemented the transactions whereby Middlesex became the nucleus of Brandeis University. He remained on the staff of the new institution as registrar and director of admissions.

Dr. Norman P. Auburn, president of the University of Akron, has succeeded Dr. Wilson Compton, who retired as president of the Council for Financial Aid to Education July 1, but who will continue to serve on the board of directors. Dr. Auburn has been granted a leave of absence by the University of Akron and will be acting president of the council until February 1. He will conduct a study of the council's program of encouraging financial support of American colleges and universities.

Philip J. May, controller and treasurer at Michigan State University, East Lansing, became vice president (of business and finance) and treasurer on July 1. Mr. May joined the university

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staff in March 1947 as controller and treasurer after having served as management analyst for the Reconstruction Finance Corporation in Washington. Previously he had been deputy state auditor of South Dakota, a member of the office of the chief of finance of the War Department during World War II, and a fiscal accountant in the War Department during part of 1946.

Clarence Scheps, controller of Tulane University, New Orleans, since 1947, has been appointed vice president in charge of business affairs of the university.



Clarence Scheps

The appointment became effective June 30. Dr. Scheps will continue his duties as university controller and as professor of accounting in the school of business administration and, in addition, will assume a larger rôle in the administration of Tulane's business program.

Arthur J. Schaefer, vice president for development at DePaul University, Chicago, was elected chairman of the college and university development section of the American College Public Relations Association at the recent national convention held in Omaha, Neb.

Wallace G. Anderson, formerly assistant director of purchasing and printing for the state of South Dakota, has been named purchasing agent for the State University of South Dakota, Vermillion. **John W. Boever**, formerly active in public accounting work, has been appointed chief accountant in the business office of the university. Announcement of both appointments was made by **William J. Curran**, business manager.

Minot Grose, for the last five years assistant to the treasurer of Amherst College, Amherst, Mass., has been appointed to the new position of acting business manager.

Eldredge Hiller, director of public information, and **Dr. John A. Pollard**, director of research, have been appointed vice presidents of the Council for Financial Aid to Education, Inc. Both have been members of the council's staff since 1953.

Evan B. Lloyd, director of development at Columbia University's school of engineering for the last six years, has been appointed assistant to the president for development at Stevens Institute of Technology, Hoboken,

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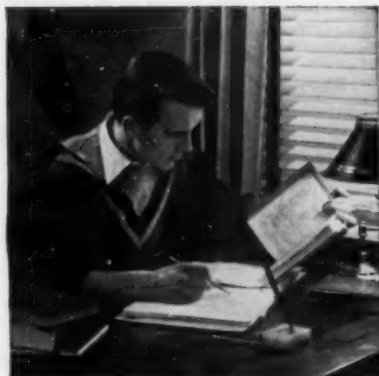
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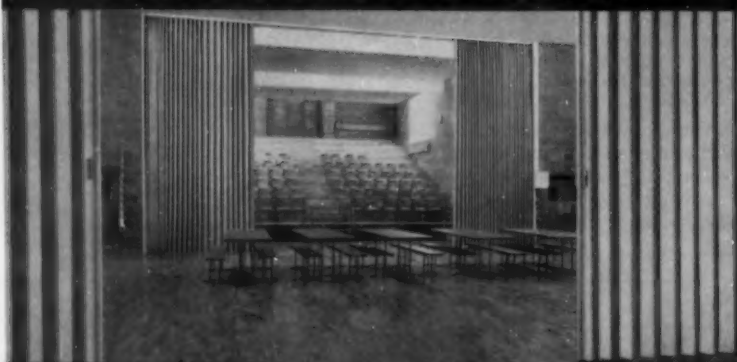




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N.J. Mr. Lloyd will coordinate a general program of development at the 87 year old engineering college and will also head up the institute's public relations staff.

Grady E. Jensen, director of business planning and procedures at New York University, has been named manager of a new central business office



Grady E. Jensen

established at the University Heights campus in the Bronx. According to **George F. Baughman**, vice president for business affairs and treasurer, Mr. Jensen's appointment to the new office will supplement the university's overall business management and will provide a valuable service for the University Heights campus through coordination of various activities, such as accounting, food service, purchasing, personnel administration, and those of the physical plant, residence halls, and bookstore. Mr. Jensen joined the N.Y.U. staff last year after serving as business manager of Station WABC-TV in New York City.

William G. Young, professor of chemistry and dean of the division of physical sciences of the college of letters and sciences at the University of California, Los Angeles, has been named vice chancellor at U.C.L.A. Dr. Young's primary duties will be the planning and development program.

L. Lawrence Taylor, formerly assistant treasurer of the University of Massachusetts, has been named controller. The new position was established by the state legislature, according to **Kenneth W. Johnson**, university treasurer.

Dr. Donald C. Stone, president of Springfield College, Springfield, Mass., on September 1 will become a member of the administrative staff of the University of Pittsburgh as dean of the recently established graduate school of public and international affairs.

Harold N. Jensen, assistant to the controller of Rutgers University, New Brunswick, N.J., has been named executive accountant and director of the department of budget and accounting. **Elwood C. Clark**, personnel officer at Rutgers, has been appointed director of the newly established department of personnel services. **John F. Nolan** is the new director of housing, succeeding **John L. Davis Jr.**, who retired. Announcement of the three promotions

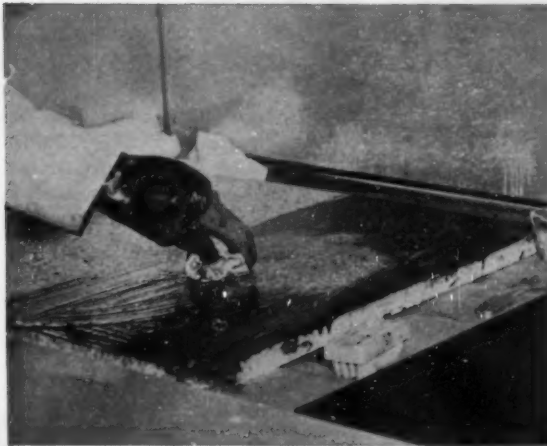
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was made by **Kenneth R. Erfft**, controller and treasurer of Rutgers.

Dr. Paul F. Sharp, history professor at the University of Wisconsin, has been named president of Hiram College, Hiram, Ohio. He succeeds **Dr. Paul H. Fall**, who will become a professor of chemistry at the University of Akron, Akron, Ohio.

Robert M. Strozier, dean of students at the University of Chicago, has been appointed president of Florida State University, Jacksonville.



R. C. Saalbach

Raymond C. Saalbach, field representative in the admissions office at the University of Pennsylvania since 1949, has been appointed vice dean of admissions.

The new appointment will become effective on October 1, when he will succeed **William H. Gramenz**, who is to be director of admissions at Coe College, Cedar Rapids, Iowa.

Three new appointments to the cabinet of **President Novice G. Fawcett** of Ohio State University have been made recently. **William S. Guthrie**, assistant to the vice president for student affairs, will be executive dean for student relations; **Frederick Stecker**, director of the Ohio Union, will be director of university relations, and **Ronald B. Thompson**, registrar and university examiner, will be executive dean for special services. They will serve on a cabinet of six persons under a new plan of administrative organization recommended by President Fawcett and adopted by the board of trustees last May. The other three cabinet posts are held by **Jacob B. Taylor**, vice president and business manager, **Frederick W. Heimberger**, vice president for instruction and research, and **John H. Herrick**, director of university plant studies.

Wendell F. Murray, for the last 16 years assistant business manager at North Carolina State College, Raleigh, has been named business manager of the Woman's College of the University of North Carolina, in Greensboro. He succeeds **John C. Lockhart**, who retired. Mr. Murray was president of the Southern Association of College and University Business Officers in 1955.

Vance D. Rogers, pastor of Trinity Methodist Church, Lincoln, Neb., has been elected to the presidency of Nebraska Wesleyan University, Lincoln. Dr. Rogers assumed his new responsi-

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bilities on August 1. He succeeds the late Dr. A. Leland Forrest, who died last spring following a brief illness.



Capt. L. W. Creighton

Capt. Liles W. Creighton, U.S.N., has been appointed executive assistant to Capt. William G. Fisher, director of physical plant of the University of

Pittsburgh. Captain Creighton's appointment was announced by Walter F. Vieh, assistant chancellor for business affairs at the university. He joined the university staff on July 1 after having retired from the U.S. Navy with the honorary rank of rear admiral after 30 years of service in various parts of the world.

Dr. Ralph Cooper Hutchison, president of Lafayette College, Easton, Pa., resigned recently. According to newspaper reports, the action culminated a long-standing dispute between the 59 year old educator and the trustees. Dr. Hutchison submitted his resignation in a memorandum to a special meeting of the board, which was attended by 24 of its 34 members.

Dr. Edwin D. Harrison, dean of the engineering school at the University of Toledo, has been chosen president of Georgia Institute of Technology, Atlanta. He succeeds the late Col. Blake Van Leer; the post has been vacant for more than 18 months.

Dr. Warren E. Wilson, dean of the engineering school at Pratt Institute, Brooklyn, N.Y., has been appointed acting president of Pratt. Dr. Wilson succeeds Francis H. Horn, who resigned.

Mother Mary Peter Carthy has been appointed president of the College of New Rochelle, New Rochelle, N.Y., a 54 year old Roman Catholic college for women. She succeeds Mother Dorothea Dunkerley. Mother Mary Peter has been dean of the college since 1949.

Dr. Irvin Stewart, president of West Virginia University since 1946, has submitted his resignation, to become effective June 30, 1958. At that time, Dr. Stewart will become professor of political science at the university. He indicated that he always had wanted to return to teaching.

Edgar S. Furniss, provost of Yale University since 1937, will retire on December 31. He will be succeeded by Norman S. Buck, associate provost.

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Harold M. Myers

Myers is a 1938 graduate of Drexel's college of business administration and has been a member of the Drexel staff since that time, serving as instructor in cooperative education and labor relations, director of graduate placement, assistant dean of men and director of the student building, dean of men, and, more recently, treasurer.

Dr. Archibald Jeter Cloud, first president of the City College of San Francisco, died recently at 78 years of age.

Harold M. Myers, treasurer of Drexel Institute of Technology, Philadelphia, has been appointed vice president and treasurer. Mr.

Dr. Cloud was head of the college from its opening in 1935 until his retirement in 1949.

Dr. Carl Sternberg, assistant to the dean of students at Queens College, New York, since 1946, died recently following a long illness. He was 42 years of age.

Willard E. Umbreit, 53, director of De Pauw University's development program, died recently following a heart attack. He had been associated with De Pauw since 1932, first as physical education instructor and coach and later as secretary of admissions, director of admissions, and, since 1952, director of the development program.

Dr. John J. Hillman, president emeritus of Simpson College, Indianola, Iowa, died last month at Des Moines, Iowa. Dr. Hillman, 92, retired in 1949.

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College and University Personnel Association

President: James N. Ewart, California Institute of Technology; secretary-treasurer: Shelton F. King, Carnegie Institute of Technology; executive secretary: Donald E. Dickason, University of Illinois. Permanent headquarters, 809 S. Wright St., Champaign, Ill.; Kathryn Hansen, editor, C.U.P.A. Journal.

National Federation of College and University Business Officers Associations

President: C. O. Emmerich, Emory University; vice president: Kurt Hertzfeld, University of Rochester; secretary-treasurer: G. W. Green, California Institute of Technology.

National Association of College Stores

President: Ray Vanderhoef, Iowa Supply Co., Iowa City, Iowa; general manager: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio.

Association of College and University Housing Officers

President: Donald W. Kilbourn, Central Michigan College; secretary-treasurer: Leonard A. Schaefer, University of Michigan.

National Association of Physical Plant Administrators of Universities and Colleges

President: W. P. Wetzel, Temple University; secretary-treasurer: A. F. Gallistel, University of Wisconsin.

Associations of College and University Business Officers

American Association

President: William M. Jones, North Carolina College; secretary: B. A. Little, Southern University.

Convention: April 24-26, Willard Hotel, Washington, D.C.

Central Association

President: Parker Hall, University of Chicago; secretary-treasurer: Ralph Olmsted, Evansville College, Evansville, Ind.

Eastern Association

President: John Schlegel, Lafayette College; secretary-treasurer: Kurt M. Hertzfeld, University of Rochester.

Southern Association

President: Claude M. Reeves, Huntingdon College; secretary: C. O. Emmerich, Emory University.

Western Association

President: Kenneth A. Dick, University of Idaho; secretary: Robert B. Gilmore, California Institute of Technology.

Association of College Unions

President: George Donovan, Pennsylvania State University; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

Canadian Association of University Business Officers

President: G. A. Grimson, controller, McGill University; secretary-treasurer: F. J. Turner, Carleton College.

Convention: June 5-7, McMaster University, Hamilton, Ont.

American College Public Relations Association

President: Lynn Poole, Johns Hopkins University; executive secretary: W. Noel Johnson, 1785 Massachusetts Ave., Washington, D.C.

classified advertising

POSITIONS WANTED

Administrative Assistant to Controller, Treasurer and Business Manager—20 years experience private business; 14 years general manager; 13 years treasurer; experience in finances, accounting, purchasing, personnel; college graduate; B.A. degree; married; 2 children. Write Box CW 361, COLLEGE AND UNIVERSITY BUSINESS.

Bookstore Manager-Purchasing Agent—45 years old, college graduate, several years experience; also experience with university printing and public relations department. Write CW 311 COLLEGE AND UNIVERSITY BUSINESS.

Business Management—What are your needs? Why not evaluate them against my qualifications outlined in a five-page personnel record? Write Box CW 360, COLLEGE AND UNIVERSITY BUSINESS.

College Placement, Personnel Officer, Student Activities Advisor, Housing Coordinator—Experienced; B.S. degree and graduate work from two large southern institutions; married, one child; will relocate. Write Box CW 359, COLLEGE AND UNIVERSITY BUSINESS.

Food Service Director—Personable, enthusiastic; knowledge of menu planning, purchasing food and equipment, labor and food cost controls, budgeting, personnel development; desire relocate California or southwest. Write Box CW 349, COLLEGE AND UNIVERSITY BUSINESS.

Physical Plant Superintendent—General supervision of buildings, site maintenance and expansion; fifteen years experience in site development and construction supervision, also property management; graduate training in business administration and personnel. Write Box CW 361, COLLEGE AND UNIVERSITY BUSINESS.

Physical Plant Superintendent or Assistant in Large Institution—College graduate in engineering, construction experience, nine years of plant management; interested in similar position in western state. Write Box CW 358, COLLEGE AND UNIVERSITY BUSINESS.

Responsible Business Office Position—Preferably upper south Middle Atlantic States; eight years experience all phases operations including auxiliaries, maintenance; university accounting degree. Write Box CW 362, COLLEGE AND UNIVERSITY BUSINESS.

Superintendent of Buildings and Grounds—Eleven years experience as superintendent in small college plus twenty years experience in maintenance, construction, planning, purchasing and supervision; engineering training; prefer southwest or west coast location in small college. Write Box CW 342, COLLEGE AND UNIVERSITY BUSINESS.

Superintendent of Buildings and Grounds—Married man with two children; 13 years experience in field of construction, maintenance and property management; personnel record good; accustomed to supervising other workers; desire position with college or university in midwest; personal interview requested. Write Box CW 346, COLLEGE AND UNIVERSITY BUSINESS.

POSITIONS OPEN

Assistant Dietitian—Residence college of 600; eastern United States; new residence hall, dining hall, and kitchen; opportunity for advancement. Send photo and resumé to Box CO 231, COLLEGE AND UNIVERSITY BUSINESS.

Bookstore Manager—Man or woman; large eastern co-ed teachers college. \$200,000 volume; send late photo and complete details, age, education, experience. Write Box CO 228, COLLEGE AND UNIVERSITY BUSINESS.

Buildings and Grounds Engineer—M. E. or equivalent; experienced to supervise maintenance operations 16 buildings; 107 acre campus and liaison with architects in dormitory building program for Protestant church related university. Send personal and employment history, resumé, stating minimum salary to Business Manager, TRINITY UNIVERSITY, 715 Stadium Drive, San Antonio 12, Texas.

Campus Foods Manager—Immediate opening for a qualified applicant; expanding food service in a southwest university; enrollment 5000; serving 1400 students three meals daily; a challenging situation in an active university community; liberal employee benefits; excellent living conditions. Please send resumé to BOX CO 230, COLLEGE AND UNIVERSITY BUSINESS.

Chief Accountant—Large, growing eastern seaboard college; thorough familiarity with institutional accounting prime requisite; administrative staff status. Send resumé and salary requirements to Box CO 226, COLLEGE AND UNIVERSITY BUSINESS.

Chief, Plant Operations—Man, preferably between 35 and 45, for position in leading college in New York State; broad administrative responsibility; experience necessary in all phases of plant operation, maintenance and alterations, supervision of custodial services. Send complete resumé of background and experience to Box CO 225, COLLEGE AND UNIVERSITY BUSINESS.

Dietitian—Co-educational college; service for 450; excellent kitchen and dining facilities; cafeteria style; college graduate with experience in food service; man or woman. Send statement of training and experience and recent photograph to Mr. T. S. Morck, Business Manager, TEXAS LUTHERAN COLLEGE, Seguin, Texas.

Superintendent of Buildings—Experienced man to direct maintenance and custodial staff in operation of growing physical plant; includes responsibility for custodial, heating plant, repair and maintenance of buildings; send late photograph and details concerning age, education, experience, references, etc. Write Mr. T. S. Morck, Business Manager, TEXAS LUTHERAN COLLEGE, Seguin, Texas.

Superintendent of Physical Plant—Opening for experienced man to head operating and custodial staff to replace present head who will retire; responsibility for repair and maintenance of buildings and grounds; new central heating system (low pressure); group life insurance; hospitalization and surgical benefits for employee and dependents; T.I.A.A. retirement benefits; we will be glad to hear from men who can not leave present job immediately, as well as any interested in early placement. Send photo and complete details to Ross Ellis, Business Manager and Treasurer, WESTMINSTER COLLEGE, New Wilmington, Pennsylvania.

Women's Residence Hall Dining Service Manager, and also Food Production Manager—Degree in Institutional Management; some experience preferred; excellent fringe benefits and good working conditions; good staff impact. Write or call BALL STATE TEACHERS COLLEGE, Muncie, Indiana. Telephone AT 4-8492, Extension 303.

The rates for classified advertisements are: 20 cents a word; minimum charge, \$4. (No charge for "key" number.)

Forms close 25th of month preceding date of issue.

COLLEGE AND UNIVERSITY BUSINESS
919 N. Michigan Avenue, Chicago 11, Ill.

WHAT'S

NEW

DEPT.

TARZIAN KINESCOPE RECORDER



Broadcast Equipment Division of Sarkes Tarzian, Inc. now offers this new film recording system for television pictures.

The new Tarzian recorder incorporates new mechanical shutters and principles which completely eliminate video splice and danger of the so-called "shutter bar."

Features a highly improved sound system built into the unit which is offered with a variable density, or a variable area sound system.

The pick-up principle involved permits the use of a retentive type, blue phosphor kine tube. With the blue phosphor kine tube, it is now practical to record television pictures on *sound recording film stock*. When this film cost is compared to the cost of recording film heretofore generally used, a savings of almost \$40 per hour of running time is achieved. Complete unit with control panel and console as illustrated, priced at \$7800.

SARKES TARZIAN, Inc., Broadcast Equipment Division
Bloomington, Indiana

WHAT'S NEW

August 1957

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 72. Circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Reinforced Cylinders for Silver Handling System

Two new cylinders, doubly reinforced at the bottom, are now available for use



in the Steril-Sil silver handling system. The cylinders are molded of durable DuPont Zytel gray nylon, about the color of stainless steel utensils, and the same material used for bearings, gears and bushings in the Steril-Sil washing units. Natural white nylon cylinders are also available.

The nylon cylinders are designed for heavy duty use without distortion or damage. They are quiet, lightweight, easy to handle, rigid and sturdy. The nylon is not affected by temperatures up to 300 degrees F. and is impervious to normal acids and alkalis. It will not scratch or dull the utensils and cools almost immediately when taken from the sterilizer. Silverware is washed in the injector type washers, eating portions up, then tumbled into empty sterile cylinders, eating portions down, for service, thus protecting the sanitary, sterilized ends until ready for use. Baskets and dispensers are available in different sizes to fit every requirement. The Steril-Sil Co., 150 Causeway St., Boston 14, Mass.

For more details circle #927 on mailing card.

Press-Down Nozzle Cleans Any Type Bottle

To speed up bottle washing, T & S has developed a new type of bottle washing nozzle for use on bottles or other containers of any size or shape. Thorough and quick cleaning is accomplished by nine powerful jet washing streams which are actuated by pressing the bottle down over the nozzle on a wide perforated disc. Water shuts off automatically when the vessel is withdrawn. T & S Brass & Bronze Works, Inc., 32 Urban Ave., Westbury, L.I., N.Y.

For more details circle #928 on mailing card.

Three Cork Shades in Asphalt Tile Line

K-550 Tangiers is the name given to the new cork hue now available in the Azrock asphalt tile line. The new color makes Azrock now available in three natural cork hues: light, medium and dark. All cork hue tiles in the line are available in 1/4 inch thickness and are pre-waxed and pre-polished at the factory. They can be installed on, above or below grade on concrete sub-floors, or over sound, smooth wood sub-floors. Ease of installation and low original cost make them desirable for use in schools, hospitals and other public institutions. Azrock Products Division, Uvalde Rock Asphalt Co., Box 531, San Antonio, Texas.

For more details circle #929 on mailing card.

PC Glass Block Now Available in Color



Attractive, cheerful color has been added to glass blocks for use in curtain walls and other structural areas. Through a method of applying a fired-on translucent ceramic finish, blocks are now available in blue, green, yellow and coral and have a median light transmission range of about 25 per cent. Diffused natural light is thus supplemented by the effect of glowing color.

Tests conducted at the manufacturer's research laboratories indicate that the color is non-fading and is unaffected by acids, alkalis and sulfides. The new color glass is especially effective for curtain wall use. It is quickly put up, provides its own insulation, and is finished inside and out when installed. Curtain walls require minimum maintenance and installation costs are low since the glass blocks constitute the wall. Pittsburgh Corning Corp., One Gateway Center, Pittsburgh 22, Pa.

For more details circle #930 on mailing card.

Protective Silicone Coating for Glassware

Siliclad is the name given to a water soluble silicone concentrate developed to give a protective coating to glassware and other materials. When diluted with ordinary tap water it is used to coat glassware, ceramics, metal, rubber and plastic materials. The water repellent silicone coating resulting is chemically resistant to acids and organic solvents and leaves a very hard, smooth and sparkling clear surface. Silicone-treated glass is described as scratch resistant with breakage reduced.

The water soluble Siliclad is easy to apply and inexpensive in use. Coated surfaces dry with no clinging drops of liquid and repel soil and stains. Clay-Adams, 141 E. 25th St., New York 10.

For more details circle #931 on mailing card.

Tempo Line in Classroom Furniture

The No. 940 chair and No. 970 desk illustrated are two units in the new Tempo line of classroom furniture recently introduced by Griggs. Styled in the contemporary manner, the furniture has clean functional lines, and styling and engineering are coordinated for greatest functional value. The tapered legs are swaged from seamless steel tubing to give the furniture a graceful modern appearance with rugged strength. All structural members are high-strength tubular steel precision welded.

One hundred per cent hardwood plywood is used for the chair backs and seats in the Tempo line. Desk tops and table tops are available either in the hardwood plywood or in Griggs "Plas-tex," a mar-resistant surface which can be wiped clean. The new Tempo chair



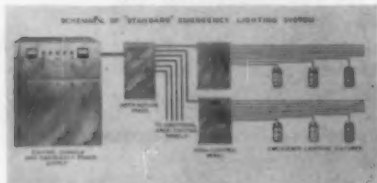
and desk are available in five colors of infra-red oven-baked enamel and are offered in a full range of sizes. Griggs Equipment, Inc., Belton, Texas.

For more details circle #932 on mailing card.

What's Now ...

Centralized System for Emergency Lighting

Emergency power is available instantly throughout the school with the new Standard Electric centralized emergency



lighting system. The system has been tested and approved by Underwriters Laboratories and exceeds the requirements of the National Electrical Code, according to the manufacturer. The self-monitoring feature reports any fault to the system by flashing lights and buzzers and sounds an alarm when an emergency lamp is removed.

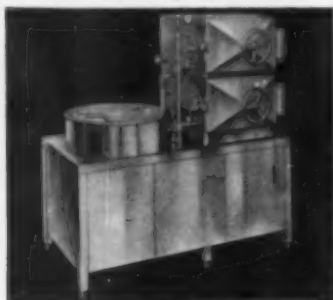
The system is instantaneous and fully automatic in operation. Emergency power goes on the instant regular power fails and goes off when power is restored. The special 32-volt battery is automatically recharged and kept at full capacity by a constant trickle of charging current. Control Console and Distribution Panel are located in an area away from danger of fire or flooding and Area Control Panels are located in corridors or closets in the areas containing their circuits. Emergency lighting fixtures are placed at strategic locations throughout the building.

The long-life nickel-cadmium battery is designed for at least 25 years of use and does not corrode or give off obnoxious fumes. The new central emergency power system has been especially designed for use in hospitals, schools, colleges and other buildings. **The Standard Electric Time Co., Springfield 2, Mass.**

For more details circle #733 on mailing card.

Complete Menu Cooked in Combination Unit

A complete nutritious menu can be cooked with minimum kitchen heat, discomfort and clean-up time in the new



Market Forge Combination Unit. Designed originally for school cafeteria kitchen requirements, the unit will prove valuable in most institutional kitchens.

It includes a steam cooker for vegetables, meats, poultry, sea food and frozen foods, and for pre-cooking or reheating, plus a steam kettle for soups, stews, gravies, casserole dishes, spaghetti and sauces.

The Combination Unit features low working height of kettle, swinging pantry faucet for ease in filling the kettle, one heavy duty trouble-free tubeless boiler, one set of easily installed connections and a built-in drain that collects condensate at one common point. **Market Forge Co., Everett 49, Mass.**

For more details circle #734 on mailing card.

Comfort Curtain Classroom Heating

A new draft-free heating and ventilating system for classrooms is introduced by Lennox Industries. Known as Comfort Curtain, the system combines residential-type heating equipment with a new concept in ventilation designed to produce a continuous circulation of fresh air at the desired temperature. The com-



pany has constructed a model two-classroom Living Laboratory school building where the new equipment will be demonstrated and constantly studied under normal classroom conditions of use. Tests indicate that the Comfort Curtain system holds classroom temperatures within one degree of the thermostat setting, regardless of outside weather.

The new system is said to effect substantial savings in classroom construction costs and to be extremely quiet in operation. It is fundamentally simple in operation, making maintenance and service negligible, and operating costs low. Expansion of school buildings is simplified since the system operates independently in modules of two and four classrooms. The system consists of a furnace for each module, an air processing unit and a bookshelf or wall duct for each classroom. The air processing unit and shelf or wall ducts are made of 16-gauge furniture steel, enameled in a mar-resistant furniture finish. They may be left in their neutral gray beige or painted. **Lennox Industries, Inc., Marshalltown, Ia.**

For more details circle #735 on mailing card.

Self-Adhesive Label for Permanent Record Cards

A new self-adhesive Tabulabel simplifies posting student grades on permanent



record cards. The labels are supplied in roll tape form to facilitate imprinting with a tabulator. With nothing to moisten, the Tabulabel can be quickly applied to the record card. The manufacturer estimates that one clerk working at average speed with an Avery H4-5 Dispenser can apply from seven to nine Tabulabels per minute. The label includes student name, subject, grade, semester hour and date. **Avery Adhesive Label Corp., 1616 S. California St., Monrovia, Calif.**

For more details circle #736 on mailing card.

Storage Units Handle Hot and Cold Foods

Food service is speeded with the use of McCall TherMcCold Hot 'N Cold Food Banks. Both hot and cold foods can be prepared well in advance of meal hours and stored. The units are available in pass-through or wall bank models, for large installations serving thousands or for small institutions.

Model TH70 is a six-door unit with two-thirds cold and one-third hot food space. Two units can be used together if required, one completely hot and the other completely cold. Within the hot unit, partitions separate meat and rolls with a separate thermostatic temperature control adjustment. A freezer section can be added if desired. Model TH96 has four sections which can be divided between hot and cold as required. Wall bank models offer similar food sections without the pass-through feature. Cabinets of all models are of all-metal construction with exterior finishes of stainless steel or white Dulux and interiors of stainless steel. Milk containers can be stored in the cold food bank. **McCall Refrigerator Corp., Hudson, N.Y.**

For more details circle #737 on mailing card.



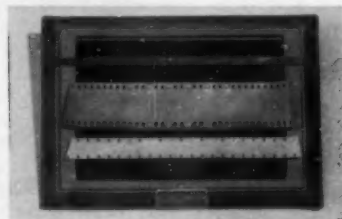
struction with exterior finishes of stainless steel or white Dulux and interiors of stainless steel. Milk containers can be stored in the cold food bank. **McCall Refrigerator Corp., Hudson, N.Y.**

(Continued on page 67)

What's New . . .

Film Repair Unit Handles Slidefilms and Movies

Both 35mm slidefilms and 16mm motion picture films that are badly torn



or otherwise damaged can be repaired with the new F&B Film Repair and Splicing Block. The new Magic Mylar transparent splicing tape makes quick and effective repairs. Precision machining for accurate registration of 35mm and 16mm film on sprockets permits repair of these films as well as splicing of 1/4 inch magnetic recording tape. The moderate cost of the unit can be quickly saved by the cost of reclaimed films which might otherwise have to be scrapped. Florman & Babb, Inc., 68 W. 45th St., New York 19.

For more details circle #938 on mailing card.

Plastic Wall Covering Is Scrubbable

Rich-Wall is the name of a new soft,

flexible plastic wall covering which can be thoroughly scrubbed. Fragile in appearance, the new product has high abrasive resistance. It is designed for institutional use and manufactured from Monsanto Chemical Company's specially developed Ulton vinyl plastic. Backed with resin treated cotton fibers, laminated under heat and pressure to prevent shrinkage, Rich-Wall is applied with regular wall paper paste. It is supplied in ten patterns and 69 color combinations. Fabritate, Inc., 515 Madison Ave., New York 22.

For more details circle #929 on mailing card.

Polyethylene Garbage Can Reduces Noise

A large 20-gallon capacity garbage can is now available in polyethylene. The lack of noise in handling this plastic container makes it especially adaptable for use in institutions for trash and garbage. It can also be used for storage and transport of supplies within the institution. It is rustproof and unbreakable, cannot retain odors and has a Lock-Lid all-around cover. The plastic can is 27 1/4 inches high and 20 1/2 inches in diameter. It is available in lawn green or gray and has corrugated sides. Straus-Duparquet Inc., 33 E. 17th St., New York 3.

For more details circle #940 on mailing card.

(Continued on page 68)

Packaged Power Unit for Science Laboratories

Designed to be installed as a permanent part of the laboratory table, the new Lab-Volt is a packaged power unit for high school and college science laboratories. Units are installed in the instructor's table or a demonstration table, with additional units in student tables as required for teaching. A line voltage convenience outlet is available on the front panel of each unit with jacks supplying alternating and direct current at low voltage. Color coded flexible cords and an assortment of lugs and clips fa-



cilitate experimental set-ups. Where a portable unit is desired, rubber feet are added. Buck Engineering Co., Inc., Freehold, N.J.

For more details circle #941 on mailing card.

WATER SAVINGS
Up to **60%**

**SHOWER HEAD
AERATES SPRAY**

**WORKS
ON LOW
PRESSURE**



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"BUBBLE-STREAM" PUSHES COSTS DOWN!



The inexpensive Bubble-Stream shower head puts every drop of water to work: first to form an abundance of lathery suds quickly with lighter soaping; then to flush away dirt and soap faster with less water. Shower time is reduced. Water is saved. Heat is saved. Hard water feels soft. Ball joint provides instant adjustment of spray angle.

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FROM THE **AMERICAN SEATING** FAMILY OF FINE SCHOOL FURNITURE

Students spend about 15,000 hours in school, from kindergarten through college. They need the best-designed school furniture you can give them.

American Seating's CLASSMATE® line, for example, excels for classroom use — improves teacher guidance and control, student learning. Note convenient corner entry to book-box on this unit, also self-adjusting back on chair. Write for free full-color catalog! American Seating Company, Grand Rapids 2, Mich. World's Leader in Public Seating.

Close-up of No. 540
chair, No. 549 table



What's New . . .

Complete Place Setting Now Available in Paper

Attractive paper dishes are now offered by Lily-Tulip in complete place settings.



A sample kit is available for use as a guide in ordering the complete service or special items. Included in the new service are an eight-ounce container for soups, stews, or spaghetti; cold cups from four to ten ounces in capacity; $\frac{3}{4}$ and one-ounce cups for creams and sauces; four and six-ounce plated dishes for salads and desserts, and Lily portion cups from one-half to five and one-half ounces for puddings and similar uses.

Plastic-coated and uncoated plates in a variety of sizes are included in the kit which also contains six and eight-ounce hot cups with handles and seven-ounce hot cups without handles, as well as the new Lily China-Cote hot drink cup in the eight-ounce size. Lids, cups and a paper place mat complete the attractive setting. Lily-Tulip Cup Corp., 122 E. 42nd St., New York 17.

For more details circle #942 on mailing card.

Pudding and Pie Fillings in Five Flavors

A new Lemon Flavor and a new Coconut Flavor, added to Universal's line of pudding and pie fillings, brings the available flavors to five. Other flavors now in the line include chocolate, vanilla and butterscotch. Specifically developed for institutional feeding, the fillings result in maximum yield per ounce of pudding powder with lower cost per service to the institution and saving in time due to their quick preparation. Universal Food Corp., 3005 W. Carroll Ave., Chicago 12.

For more details circle #943 on mailing card.

Lightweight Generating Plant Is Self-Contained and Portable

Full-capacity direct current electric power is provided with the new Onan portable 5000-watt generating plant. The completely self-contained unit is lightweight and portable and will provide power to operate lights, universal motors and other equipment requiring direct current power. It is operated by an easy starting two-cylinder gasoline engine which is specifically designed for smooth running, heavy duty, economical electric plant operation. D. W. Onan & Sons, Inc., 2515 University Ave. S.E., Minneapolis 14, Minn.

For more details circle #944 on mailing card.

(Continued on page 70)

Recessed Soap Dispenser Reduces Maintenance Time

A new completely recessed soap dispenser with satin stainless steel finish gives a modern appearance to all restrooms. The unit employs many construction features which improve its efficiency and reduce maintenance costs.

The 21-ounce dispenser mounted on the back of the locking door swings out for easy servicing. The open mouth design permits quick filling with little spillage. The dispenser has one moving part, the plunger which releases a measured quantity of soap on the up-stroke and will not bleed. A hide-away drip pan collects user spillage and is easily removed for cleaning only when the door is open to protect against theft. The lock-



ing door protects against vandalism and clogging of dispenser. 20 Mule Team Products, U. S. Borax & Chemical Corp., 630 Shatto, Los Angeles 5, Calif.

For more details circle #945 on mailing card.

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America's Most
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by VERDIN



VERDIN ELECTRONIC BELLS

Glorious bell music at moderate cost. Automatic ringing of 168-hour programs. Hour Strike, chimes, Westminster Chimes, peals, carillons, or single bell, available.



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Majestic carillons, chimes, peals in genuine cast bronze bells! The ultimate in bell craftsmanship. Bells rung automatically, or easily played on keyboard. Week-long schedules.



VERDIN ELECTRIC BELL RINGERS

Your present bells used. Electric ringing fully automatic, or by manual control.



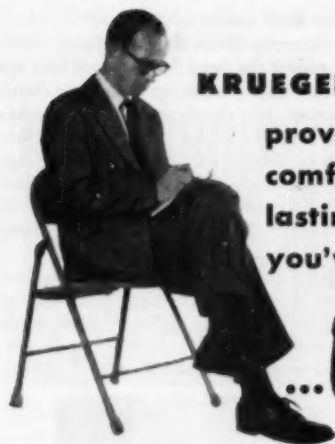
VERDIN TOWER CLOCKS

Precise in accuracy. Synchronous motor-driven unit. Beautiful illuminated dials from 3 ft. to 12 ft. diameter. Hour Strike optional. Old tower clocks modernized.

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KRUEGER SERIES 80

provides more
comfortable, longer
lasting seating than
you've ever known

...Why?

COMFORT AS YOU LIKE IT — WITH EXTRA LARGE SEATS AND BACKRESTS

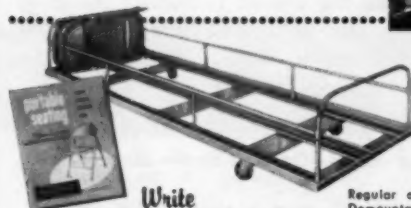
- Larger, comfortable contour-shaped seats — 15½" wide x 16" deep
- One-piece contour shaped steel seat (No. 81) or 5-ply hardwood veneer contour shaped seat (No. 82)
- Smooth, baked-on enamel finish in Beige, Azure Grey or Sounder's Green

STURDY CONSTRUCTION FEATURES ASSURE LONGER THAN EVER CHAIR LIFE

- Heavy 18-gauge electrically seam welded tubular steel frames
- L-shaped steel cross bar beneath seat for extra backing strength
- Built-up steel seat spacers for stronger pivot rod bearing points
- Solid steel pivot and stop rods double as frame bracers and strengtheners
- Tubular steel leg stretchers on front and rear legs increase frame rigidity
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DESIGNED AND ENGINEERED FOR COMPLETE SEATING SAFETY

- Non-marring, annular design rubber feet tightly secured over steel dome gliders prevent floor skidding
- Fully covered folding hinges safeguard against pinching
- No sharp edges—all are fully rolled and beaded to protect against injury
- Non-tipping Y-type design permits edge of seat sitting without tipping



Write
For new, complete line catalog
No. 700 as well as brochure 100.

Demountable CHAIR TRUCKS

Seven standard sizes hold both X-type channel or Y-type tubular chairs—upright or horizontal. Demountable ends and exclusive chan-angle frames permit stacking empty trucks one on the other.

KRUEGER
METAL PRODUCTS • GREEN BAY • WISCONSIN



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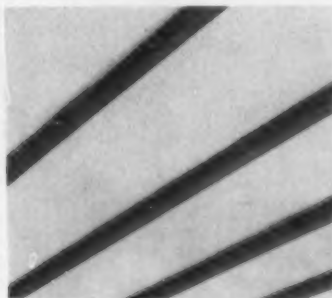
ADDRESS _____

CITY _____ STATE _____

What's New . . .

Combination Roof Deck Has Acoustical Finish

Noise-quieting properties are part of the under side of the new Armstrong



Cushiontone Roof Deck. The one product combines insulation, vapor barrier and interior finish acoustical material. It absorbs up to 60 per cent of the noise that strikes it and is made in two by eight-foot planks, two or three inches thick. The product is composed of layers of asphalt-impregnated insulation board, laminated to an interior surface of insulation board which has been perforated to muffle noise. Armstrong Cork Company, Lancaster, Pa.

For more details circle #146 on mailing card.

Redi-Serv Food Conveyors Used Singly or in Groups

The Redi-Serv Food Conveyor is a

scientifically insulated unit with Chromalox electrical heating elements and Robertshaw thermostat, wired for 110 volt current, carrying standard size stainless steel food pans. Individual units can be used for storage or mounted on carrier or wheels for carrying to floors or to other buildings. For large service needs the Redi-Serv units are mounted on trucks, complete with serving top, in units of two, three or four, depending upon the number of meals to be served. Units are readily adapted for cold food service by incorporating the Redi-Serv Cold Plate.

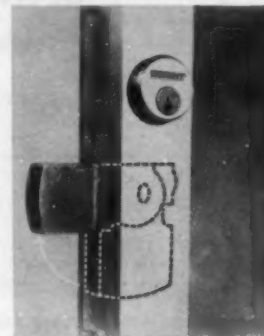
Redi-Serv Food Conveyor units are offered in three sizes; Junior, Standard and King sizes. All units are engineered and built to provide maximum efficiency in temperature retention and to withstand heavy duty service. The formed construction gives extreme rigidity to the cabinets, yet there is no metal-to-metal contact between the inner and outer shells which might affect temperature retention. Cabinets are reinforced with cast aluminum corners for protection against damage and to permit steady stacking of one cabinet on another. The flush door construction and positive locking device are other features of the units. A label holder for cards is included. Precision Metal Products, 524 Wyatt Bldg., Washington 5, D.C.

For more details circle #147 on mailing card.

Pivot Bolt Lock for Narrow Stile Doors

To meet the need for a secure lock for narrow stile aluminum-and-glass doors, Kawneer has developed the Maximum Security 1850 Lock. Action of the lock relies on a hardened steel bolt in a hanging-down position when unlocked. When triggered into action by a half-turn of the key in the cylinder, the bolt pivots up into lock position.

The construction permits a long bolt throw of 1 3/8 inches from a backset as short as one inch. There is as much bolt within the lock chamber as is projected, making the opening blocked with



a solid bar of hardened steel. Many designs are possible with the styles available. Kawneer Company, Niles, Mich.

For more details circle #148 on mailing card.

Those who make a living feeding or housing know the value of interior design... by mandel

Mandel Brothers Contract Division has long been management's source for the best in interior design, as well as functional, up-to-date furnishings. Mandel Men have helped many realize the most from building or remodeling budgets.

When yours is a problem of making your premises more inviting, call a mandel man.

Experienced in Designing and Furnishing Complete Installations

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■ Fred H. Vander Schuer / Sales Manager

LOOKING FOR SOMEONE?

Someone to fill a vacancy in your staff—a Business Manager—Superintendent of Buildings and Grounds—Purchasing Agent—Director of Food Service and Dormitories?

Or maybe you are thinking about making a change.

If so, consider placing a "Classified Advertisement in the next issue of College and University Business.

It costs but 20c a word (minimum charge of \$4.00) to place your story before the administrative officers of colleges and universities in this country and Canada.

"Classified Advertisements" are working successfully for others—they can do the same for you.

WRITE TO: Classified Advertisements

COLLEGE and UNIVERSITY BUSINESS

919 N. MICHIGAN

• CHICAGO 11, ILLINOIS

What's New . . .

Table-Top Copying Machine Has Cabinet Floor Stand

A new cabinet floor-stand which provides storage space for copy paper and



other office supplies is available for use with both of the new Thermo-Fax table model copying machines, the "Fourteen" and the "Premier." The Thermo-Fax "Fourteen," illustrated, copies material up to 14 inches in width. Copy paper and original are fed into the machine and return automatically in four to seven seconds with an exact replica on the copy paper. Minnesota Mining & Mfg. Co., 900 Fauquier St., St. Paul 6, Minn.

For more details circle #949 on mailing card.

Liquid Floor Finish Has High Luster

Floors are given an attractive long-lasting luster, without buffing, with the

new Nu-Hygloss liquid floor finish. For average wear a two-coat application of Nu-Hygloss, after stripping floors, is said to give satisfactory protection and luster that will last for months. An additional coat may be applied for longer protection. Nu-Hygloss is said to contain no solvents or harmful chemicals, is completely slip resistant and resists scuffing. The Penetone Company, Box 65CUB, Tenaflly, N.Y.

For more details circle #950 on mailing card.

Packaged System for Low-Cost Light Control

The new DC-1000 Series Packaged Luxtrol Light Control equipment is a low-cost, portable unit for light dimming, brightening and blending for schools, colleges and other auditorium and small theater needs. The small, low-cost apparatus is available in ten models, each consisting of six non-interlocking 1000 watt controllers operated by different colored levers. Standard assemblies are available in a wide variety of output connections. The Superior Electric Co., Dept. DC1, 83 Laurel St., Bristol, Conn.

For more details circle #951 on mailing card.

Volume Production Cooking With Garland Unit

The new Garland No. 6050 volume cooking unit features a broiler within

(Continued on page 72)

two ovens. The gas-powered unit has one standard heavy duty controlled type oven above the broiler and in the area under the broiler is another automatically controlled oven. Each oven has a cooking area 26 by 29 inches in size. The fast heating broiler is 26 by 33 inches.

A special feature of the broiler is a stainless steel mesh installed in the ceramic brick roof to spread the temperature evenly throughout the grid rack. The grid itself is of special design with heavy round bars for free-flowing and ample heat holding capacity. The new



broiler is available in Black Japan, stainless steel and the new black porcelain finishes. Garland Range Division, Welbilt Corp., Maspeth 78, L.I., N.Y.

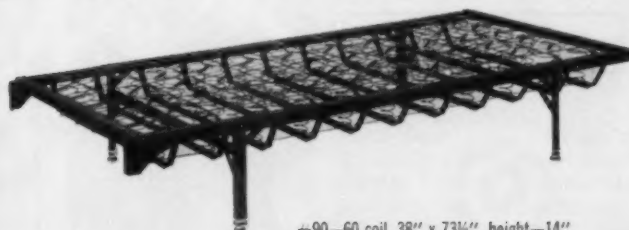
For more details circle #952 on mailing card.

DURABILITY STRENGTH LOW COST

This is the bed designed to stand-up under unusual dormitory usage. Long-life . . . you'll have no replacement problems . . . do as many large, leading colleges and universities have done* . . . order the Moorest Dormitory Bed.

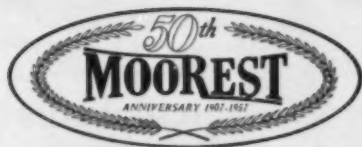
*Names upon request.

Moorest Dormitory Beds



#90—60 coil, 38" x 73 1/4", height—14".

#92—66 coil, 38" x 80", height—14".



THE MOORE COMPANY, Muncie, Ind.

The Moorest Dormitory Bed is constructed with extra sturdy steel angle frame. Cross helical coil top springs, 5/8" bands lengthwise and crosswise for added strength. Brass leg mounts and large glides. Brackets for attaching headboard.

Write for more information

What's New . . .

Literature and Services

• "Six Major Wayne Rolling Gymstand Advances" is the title of a new four-page bulletin available from Wayne Iron Works, Wayne, Pa. The improvements include a new rolling foot system providing added foot support; new braking system for increased holding action; new power operation for easier one man operation; new Philippine Mahogany construction; new surfacing method for all four sides of the wood, and new superior polyester surface finish for better appearance and more resistance to abrasion.

For more details circle #953 on mailing card.

• "The Dispensator Method of Food Service Operation" is the title of a new brochure prepared by W. H. Frick, Inc., Citizens Bldg., 850 Euclid Ave., Cleveland 14, Ohio. How Frick mobile dispensers handle clean and soiled dishes, glasses and cups in wire racks, and deliver prepared food, is described through diagrams, illustrations and detailed data.

For more details circle #954 on mailing card.

• Nutting Floor Trucks are described in a new booklet prepared by Nutting Truck and Caster Co., 1476 W. Division St., Faribault, Minn. 27 different models of two wheel trucks and four wheel platform trucks are described as well as many other special duty trucks.

For more details circle #955 on mailing card.

• How aluminum foil saves time and money in institutional cooking is described in a new booklet, "Helpful Hints," prepared by Kaiser Aluminum Corp., Institutional Service Dept., 1924 Broadway, Oakland 12, Calif. Quantity recipes on detachable perforated card stock are included along with diagrams, portion yields and sizes.

For more details circle #956 on mailing card.

• "Footcandle Levels and Interior Lighting Design Data" is the title of a technical booklet released by Westinghouse Electric Corp., Lamp Div., Bloomfield, N. J. Data on illumination levels for all types of institutional, commercial and industrial interiors is included. Interior lighting design employing the Lumen Method of Calculation is explained and complete tables for calculation and easy reference are included.

For more details circle #957 on mailing card.

• A new multi-colored wall chart depicting microscopic molds has been prepared by Chas. Pfizer Co., Inc., 630 Flushing Ave., Brooklyn 6, N. Y., for high school and college science classes. The 10 by 20-inch chart illustrates 16 species of molds as they might appear through a microscope. A key to the painting lists the species and their significance in vital antibiotic and chemical preparations.

For more details circle #958 on mailing card.

• The use of Barber-Colman automatic electric temperature control systems is described in a new booklet, "Better Control . . . electrically for Heating and Ventilation systems in schools, colleges and other institutional buildings." Prepared by Barber-Colman Co., 1300 Rock St., Rockford, Ill., the non-technical booklet discusses the correct application of electric controls, the use of control centers for simple installation and operation, and air distribution products.

For more details circle #959 on mailing card.

• A new catalog describes the **Donnell Line of Library Furniture** manufactured by Standard Wood Products Corp., Library Div., 47 W. 63rd. St., New York 23. Available models of charging desk units, card catalog files, shelving, tables, chairs and accessories are illustrated and described with complete specifications. Typical installations in various institutions are also illustrated.

For more details circle #960 on mailing card.

• "Educational Utilization of Masonite Peg-Board Panels and Fixtures" is described in a new booklet released by Masonite Corp., School Service Bureau, 111 W. Washington St., Chicago 2. Six sections describe and illustrate their use from kindergarten through junior college. Storage and utility, application detail, and fixtures are also described.

For more details circle #961 on mailing card.

**Restores resiliency
conditions wool fibers
that have been matted
by traffic & scrubbing.**

Tinolan process was developed in a leading museum to do a superior job of restoring rare tapestries and wool fabrics. There is nothing else equal for carpets and rugs.

Easier—Costs less

Rugs and carpets are treated without removal; are back in service the same day. It's less work and costs less in money than harmful scrubbing with the usual detergents. Tinolan mothproofs too, while it restores.

Write for trial offer data.

TINOLAN

The Tinolan Company of America, Inc., Wallingford Rd., Media, Pa.

Before

After



Super Value CHEST OF DRAWERS

Made of solid birch, with burn- and scratch-resistant plastic top. Has five drawers; center drawer guides; recessed drawer pulls. Features dust-proof, full dovetail construction. Supplied in any finish you specify.

The #1088 Chest illustrated is part of our complete line of wood furniture for hospital rooms and dormitories

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1053

EICHENLAUBS
Contract Furniture
3501 BUTLER ST., PITTSBURGH 1, PA.
ESTABLISHED 1873

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AND USE THESE CARDS**

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When, in either an advertisement or "What's New" you locate the product, turn to the index to advertisements on the preceding page or to the index of "What's New" items (right) where you will find the key number for the item. Items advertised are listed alphabetically by manufacturer. "What's New" items are in Key Number order. Circle the corresponding key number on the card below for each item in which you are interested. The second card is for the use of someone else who may also want product data.



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PERMIT NO. 126
SEC. 34.9 P. L. & R.

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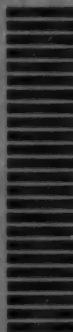
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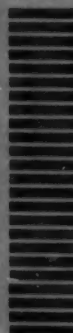
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August, 1957

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

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				Cov. 4			Cov. 2	Cov. 3

NAME _____ TITLE _____

INSTITUTION _____

ADDRESS _____ CITY _____ ZONE _____ STATE _____

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NAME _____ TITLE _____

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Universal Foods Corp.

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Barber-Colman Co.

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Standard Wood Products Corp.

961 "Utilization of Peg-Boards"

Masonite Corp.

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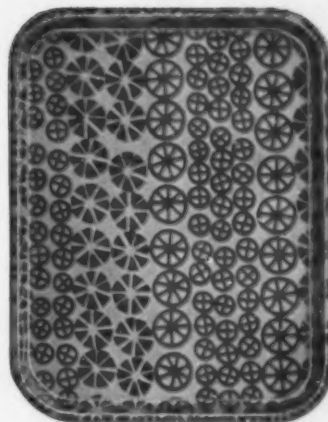
60% of the plastic trays used in America are BOLTABILT trays. Smooth-finish plastic with exceptional durability cuts replacement costs.



BOLTA CORK TRAYS

NON-SKID, CORK-TOP TRAYS

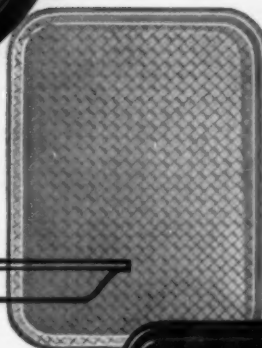
Cuts down breakage and noise. Durable non-skid surface grips dishes and glassware . . . makes serving safer and easier.



BOLTA TEMPO-TRAYS*

**WORLD'S FIRST
DESIGNER TRAYS!**

BOLTA quality with a dash of fashion! Created by world's leading designers, they are available in 34 beautiful color-and-pattern combinations!



BOLTABEST

**SUPER-
STRENGTH
IN COLOR**

Exclusive 17-layer lamination adds years of colorful use. Attractive linen, pearl and silhouette patterns and colors for every decor.



Here are trays that enhance every meal,
every decor . . . trays that combine finest
construction qualities with lasting beauty and wear!
BOLTA TRAYS are impervious to cigarette
burns and food acids . . . withstand abuse and normal dishwashing
temperatures. Lightweight and non-clattering, they
will not warp, split or stain . . . wipe clean
to a gleaming surface!



BOLTALITE

THE ROYALTY OF TRAYS

Toughest trays on the market! Made of rugged hard rubber, with handsome mahogany finish. Won't clatter when stacked or dropped.



THE GENERAL TIRE & RUBBER COMPANY

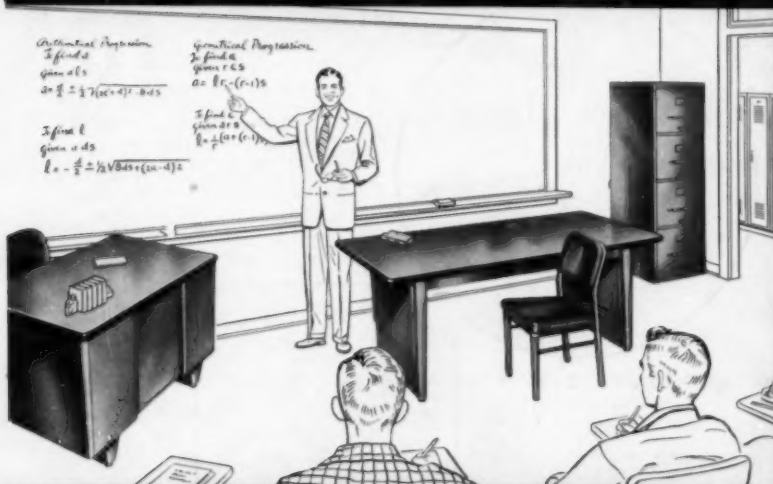
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ASE STEEL FURNITURE AND LOCKERS



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No. 835
PRINCIPAL'S
CHAIR



No. 5401
LETTER SIZE
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POSTURE
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BLUEPRINT
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